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Electrical Contracting

With Which Is Incorporated
The Electragist

March
1929

A.B.C. =
Armored Cable
Double Armored Cable

3
REVOLUTIONARY
INNOVATIONS IN
the New
**National
Cable**
-DOUBLE
ARMORED-

1
BONDHOOK Armor of
steel—giving maximum
grounding continuity.

2
KRAFT ARMOR between
conductors and steel.

3
ANTI-SHORT Bushing be-
tween conductors and steel
prevents shorts.

6
WIRING SYSTEMS
and FITTINGS
FOR
CONCEIVABLE
REQUIREMENT

National Electric Products Corporation
National Metal Molding Division
Pittsburgh, Pa.



Circulation this issue 15,000 copies, in Contracting field

Every feature of this *New* Hubbell Candle Socket

wins approval

New simple mechanism

..Smoother action..

...Longer life...

Easier to install and wire

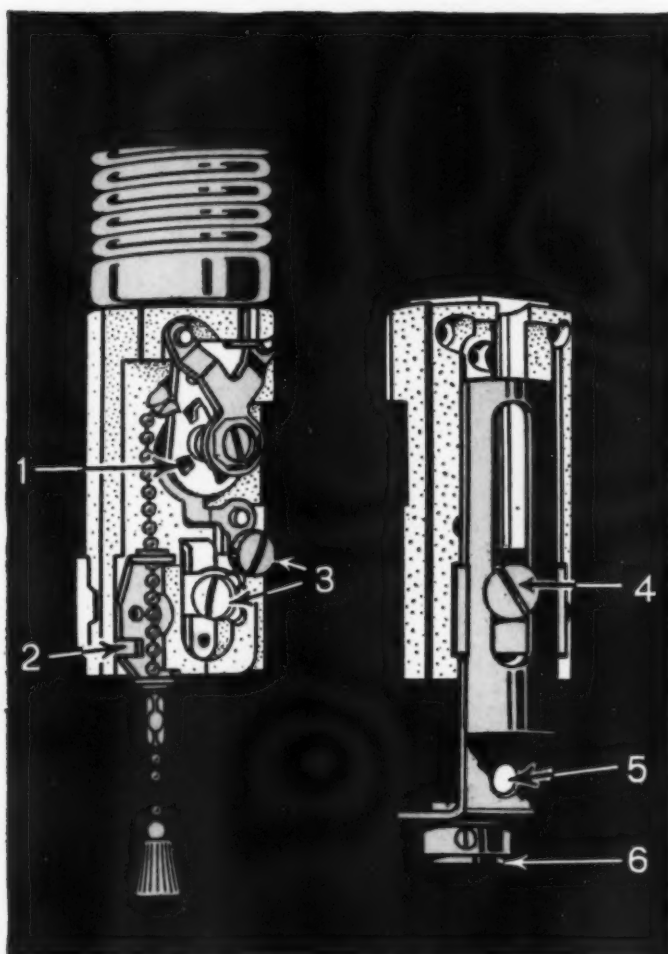
JUST take the new Hubbell Candle Socket and compare it with one of former design and construction. Then you'll know why every feature of the new socket is winning enthusiastic approval.

Compare the new tripping mechanism. Its extreme simplicity...smooth positive action... sturdy construction... all show immediately why the new Hubbell Candle Socket will serve longer without mechanical trouble.

Note the design of the improved Hickey. See how it has been made to save wiring and installation time.

Some of the features of this new Hubbell Candle Socket are briefly described here. They will show why this socket will be demanded ...and why you should obtain samples and information, now.

HARVEY HUBBELL, Incorporated
BRIDGEPORT, CONNECTICUT, U. S. A.



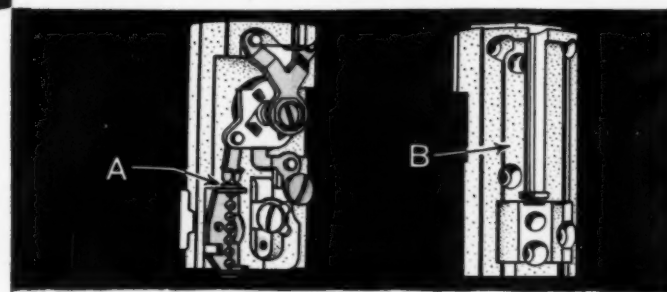
An improved Hickey . . . easy to detach and adjust

Hickey has been redesigned for greater wiring ease and installation convenience. Note these features:

Easily detached from socket or adjusted by loosening one screw instead of the usual two. (See arrow No. 4.)

Hole provided for inserting screw driver to tighten on fixture. (See arrow No. 5.)

Bushing for attaching to fixture has five full threads and set screw. (See arrow No. 6.)



New simplified mechanism

smoother action—trouble-free

New tripping mechanism is smooth and positive in action—fibre segment engages commutator directly—(see arrow No. 1).

Stop for paper shell which can be depressed to take glass or fibre candle—(see arrow No. 2).

Binding posts on one side for wiring convenience (see arrow No. 3).

Ratchet and chain brought to complete stop when clasp reaches stop—no strain on fibre segment—cannot pull out—(arrow A).

A one-piece porcelain body for strength and proper alignment—(see arrow B).

Parts are riveted to porcelain wherever possible.



HUBBELL

Candle Sockets

Electrical Contracting

With Which Is Incorporated The Electragist

S. B. WILLIAMS
Editor

Vol. 28

MARCH, 1929

No. 5

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RESALE PRICE NEWS

The Resale Price Service will be found this month in the middle of the book. It was felt that this position would not only make it easier for our readers to use the section but would keep the section firmly in place. Last month we tried taping the back. It took too much time to fix the necessary three or four miles of tape to the inside of the covers.

There were exactly 400 price changes in this month's service, besides a few additional items.

In line with the advancing price of copper, wire prices are higher. See pages PL-26, 27 and 28 of the Resale Price Service in this issue for the new prices.

Type A surface cutout box prices, on the other hand, are lower—see page PL-6.

Meter service switches—PL-20—show a small reduction.

Some slight changes have been made in metal moulding prices, PL-15.

For the first time, we are able to quote prices on the new sheathed cable containing the third wire for grounding, see PL-9.

Prices on several more sizes of park cable for 600 volts have been added, PL-28.

Published monthly. Entered as second class matter November 14, 1928, at the post office at Chicago, Illinois, under the Act of March 3, 1879. Copyright, 1929, by The Electrical Trade Publishing Company.
Subscription: U. S., \$2.00; Foreign, including Canada, \$2.50. Single copies, 20 cents.

ELECTRICAL TRADE PUBLISHING COMPANY

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CHAS. W. FORBRICH, Vice-Pres.

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7 jobs for which you should use Romex



ROMEX
NON-METALLIC
SHEATHED CABLE

- 1 Rewiring old houses
- 2 Wiring new houses
- 3 Wiring electric ranges
- 4 Wiring electric refrigerators where new circuit is necessary
- 5 Surface wiring of private garages and similar buildings
- 6 Extensions for additional convenience outlets
- 7 Battery charger circuits and similar radio installations

If you would like to know of other places where Romex is superior, write for the latest Romex booklet.

ROME WIRE COMPANY
DIVISION OF GENERAL CABLE CORPORATION
Rome, N. Y.

ROME WIRE

FROM WIRE BAR TO FINISHED COPPER WIRE

Advertising Makes Price Service Possible

AMONG the many letters which we have received from electrical contractors praising our Resale Price Service, are a few which offer the suggestion that this section be punched for binding and perforated so that it can be easily detached from the issue. In other words, virtually a separate Resale Price Section is advocated.

While we appreciate the interest that has prompted these suggestions, the contractors in question have doubtless not stopped to consider that our price information if published and sold separately, would cost each subscriber many times the amount he now pays for his annual subscription. We are able to present a service such as this only through the co-operation of the manufacturers whose advertising appears in ELECTRICAL CONTRACTING.

AND since this advertising is obviously enhanced in value by reason of the continuous reference to the price section by the contractors, it follows that removal of the price section would lessen the value of the advertising space which the manufacturer buys.

ELECTRICAL CONTRACTING knew in advance that the actual cost of an editorial service as comprehen-

sive as our section of suggested resale prices, would exceed the net return from contractors for subscriptions at \$2.00 per year. And this does not take into consideration the cost of the regular editorial section, which in ELECTRICAL CONTRACTING is far above normal.

WE were convinced, however, that a publication that would combine a practical service of such a helpful nature as our resale prices and in addition would prove a comprehensive editorial program along pictorial lines, would become so indispensable to the field that its tremendous value as a medium for the manufacturers' advertising, could not be questioned.

To the thousands of subscribers who already have come to look upon ELECTRICAL CONTRACTING as their most valuable asset and to those who day by day are discovering the importance of the service which we are performing, we would like to point out that the manufacturers who advertise in ELECTRICAL CONTRACTING, are, of course, trying to sell their products but in a larger sense, they are manufacturers who believe in the contractor and are making it possible for us to serve you.

It's NEW and BETTER

DURAFLEX

REG. U.S. PAT. OFF.
DOUBLE ARMORED
A.B.C.
Armored Bushed Cable



Approved by
Underwriters' Laboratories, Inc.

Where it's New and Why it's Better!



This is the A. B. C.
ANTI-SHORT Bushing
An ample supply is fur-
nished with every coil of
Duraflex A. B. C.

A Better Cable — that is the keynote of Duraflex A. B. C. It means more profits to you, for this **KRAFT ARMORED** cable is quicker and easier to install and it is double-guarded against shorts.

No more troublesome stripping of over-braids. Just unwind the **KRAFT ARMOR** and snap it off. It breaks inside the steel sheath, far enough back so the **ANTI-SHORT Bushing** can be slipped between the conductors and the steel armor.

That is all — The end is ready for the outlet box. Quick, isn't it? And remember . . . the **ANTI-SHORT** provides additional tough insulation right where it is most needed.

For speed and safety on wiring jobs, specify Duraflex A. B. C. It's a Durabilt Product.

TUBULAR WOVEN FABRIC COMPANY,
PAWTUCKET, R. I.

It's a DURABILT Product

Electrical Contracting

With Which Is Incorporated The Electragist



A MESSAGE from John Wise *The Successful Contractor*

DEAR Mr. Editor:
I've been looking over this Price Service of yours pretty carefully for the past two months, and I certainly was shocked and disappointed not to find mention made of the most important item that goes into a bid.

I finally decided I'd better write you a letter about it.

What I miss in these Suggested Resale Prices is the price the contractor should put on *himself*. I thought at first that maybe I'd find this price divided up under three or four headings such as *brains, experience, know-how, advice*, or some such, but it's not there anywhere.

Now, Mr. Editor, you ought to know that the contractor who doesn't figure himself into every bid is cheating his customer. What the customer wants is not a miscellaneous lot of supply items strung together into circuits. What he wants more than anything else is that thing we call "know-how."

And know-how is something that's always charged for. If you don't think it is, just try to get a little free advice from a lawyer. Or a doctor. Did you ever hear of any kind of a doctor, except some phoney quack, charging for medicine and throwing in the know-how for nothing?

Trouble with us electrical contractors is that a lot of us don't know how to charge for ourselves. We haven't got any Suggested Resale Prices for brains and experience.

And so I suggest to you, Mr. Editor, that you

work out some scheme so's these schedules will be included hereafter, something like this:—

SUNDRIES

Type	Brains	Std. Pkg. 100 Brain-throbs
Dumb		\$0.02
Sluggish .....		.03
Medium .....		.44
Keen		3.77

Practical Experience

Type	Per Year
Thoughtless .....	.00001
Ordinary .....	.50
Wide Awake	2.87

Undoubtedly, Mr. Editor, your expert calculators can work out complete schedules along this line, and I'm sure you'll realize what a great service it will be to the industry to give Suggested Resale Prices on such items as I've mentioned.

The only trouble is that some contractors are going to say that because their brains are home-made they hadn't ought to charge for 'em.

Well, if that's the kind of brains they've got, maybe they're right.

Then, of course, there's those who will bid on Medium Grade Brains and then substitute Dumb Brains. You'll have to warn these birds that while the inspector won't catch 'em, their customers may ask 'em to prove that they made good delivery.

Of course, this is all just a rough idea. But here is the main idea and I know it is a good one:

The contractor who doesn't charge a fair price for his brains, his experience and his know-how is price-cutting on the most important items.

John Wise

Pay an Income Complete

By
ANDREW H. BLASS, C.P.A.
Senior Partner Andrew H. Blass & Co.,
Accountants and Auditors for the Electrical
Contractors' Association of Pittsburgh

INDIVIDUAL INCOME TAX RETURN
FOR NET INCOME FROM SALARIES OR WAGES OF MORE THAN \$500
ANNUAL INCOME OF \$5,000 OR MORE, FROM BUSINESS, PROFESSION, SERVICE, OR SALE OF PROPERTY
For Calendar Year 1928
Any Electrical Contractor
Any Town
U.S.A.

INCOME

1. Salaries, Wages, Commissions, etc. (Show name and address of person from whom received)

2. Income from Business or Profession (Show details)

3. Income from Real Estate, Stocks, Bonds, etc. (Show details)

4. Income from Dividends, etc. (Show details)

5. Income from Other Sources (Show details)

DEDUCTIONS

6. Standard Deduction (Show details)

7. Deductions for Dependents (Show details)

8. Deductions for Charitable Contributions (Show details)

9. Deductions for Other Expenses (Show details)

COMPUTATION OF TAX

10. Gross Income (Show details)

11. Deductions (Show details)

12. Net Income (Show details)

13. Tax (Show details)

14. Refund (Show details)

15. Total (Show details)

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12. Net Income (Show details)

13. Tax (Show details)

14. Refund (Show details)

15. Total (Show details)

If you are a contractor with \$5,000 annual volume or over, irrespective of how you made out, Uncle Sam is interested enough in you to insist on your preparing an income tax report showing in detail your volume of business, business expenses, and net gain or loss.

When you set down your volume of business, be sure to include only that portion of billings to customers that represents actually completed jobs. One of the places where the contractor can lose money is just at this point. He thinks and proceeds on the theory that all bills sent to customers represent business done. On a job where only part of the work is done, and where billing is made say each month, the contractor usually gets out in billings more than his material and labor cost to that point. This excess is not a profit—yet if he reports all bills rendered as volume of business and all material and labor payments as cost, he'll show a profit where in fact a loss may later develop.

Uncle Sam is fair enough to say to you, in sub-

stance: treat the outlay for material and labor on uncompleted jobs as temporary investment the same as inventory. Consider your billings until the job is done in the nature of advances or loans from the owner. Let me have my share of the profits, if any,

Tax only on Work

Uncle Sam Will Visit You Shortly, Calling for His Share of the 1928 Profits

By throwing work in progress into inventory, as in upper report, rather than income as in lower permits one to pay a tax only on profits actually received as shown in the reproductions of the fronts of the same two reports on the opposite page.

The image shows two overlapping 1928 tax forms. The top form is Schedule C, 'Profit or Loss from Business (Sole Proprietorship)', and the bottom form is Schedule D, 'Capital Gains and Losses'. Both forms contain various sections for reporting income, expenses, and gains/losses. The forms are filled out with handwritten numbers and some text, illustrating the tax reporting process for a sole proprietor in 1928.

as, when, and if such profit is finally shown when the job is done and all costs assembled.

To illustrate this point there are presented here two tax reports for the same contractor for the same year. In the first one Mr. Electrical Contractor shows all bills rendered as business done, or sales; while in the second case he shows as sales only the returns from finished work. Note carefully that by showing his report the second way he pays no taxes, as the business failed to show a taxable profit. Except for the camouflage of name and figures the facts illustrated are taken from an actual case.

Also, play safe on inventories. You buy material sometimes for special jobs, at other times you buy in quantity and expect to use later. If the material is standard and usable, list it in your inventory at cost or present replacement price, whichever is lower. If, on the other hand, the material is obsolete, or not usable because of its special nature, list

it at scrap or sale value only. Don't fool yourself by saying that someday someone will have a job for you on which you could use that panel-board which was specially built for a job and then not used and which in addition is also out of date.

Don't forget that every business carried on on a credit basis has losses in collections. If you have long outstanding accounts, especially if there's any question as to the ability of the customer to pay, or controversy as to the amount, write these items off, as losses. This doesn't mean that you'll then give up all attempts at collection. It simply means that Uncle Sam is fair enough to say that he's not entitled to his share of the profits on a transaction where you can't get the money.

These are the major points to watch for in making your split of profits with Uncle Sam. Careful attention to them may save you money.

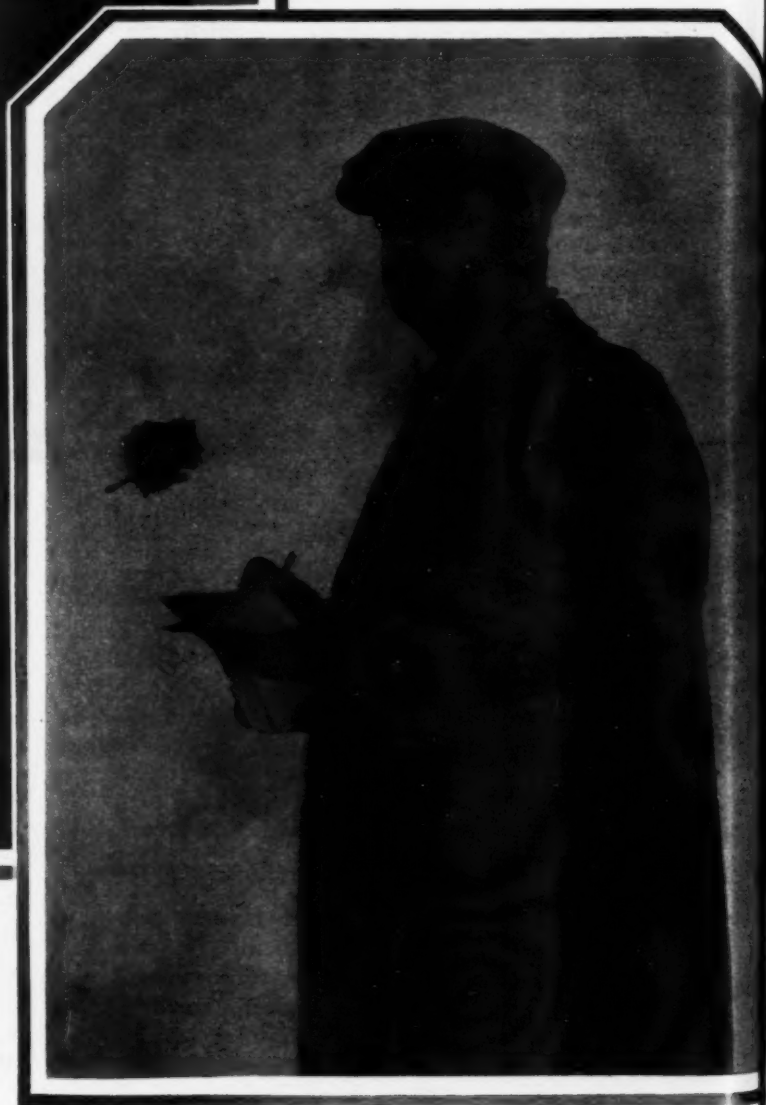
STUDY *the* House

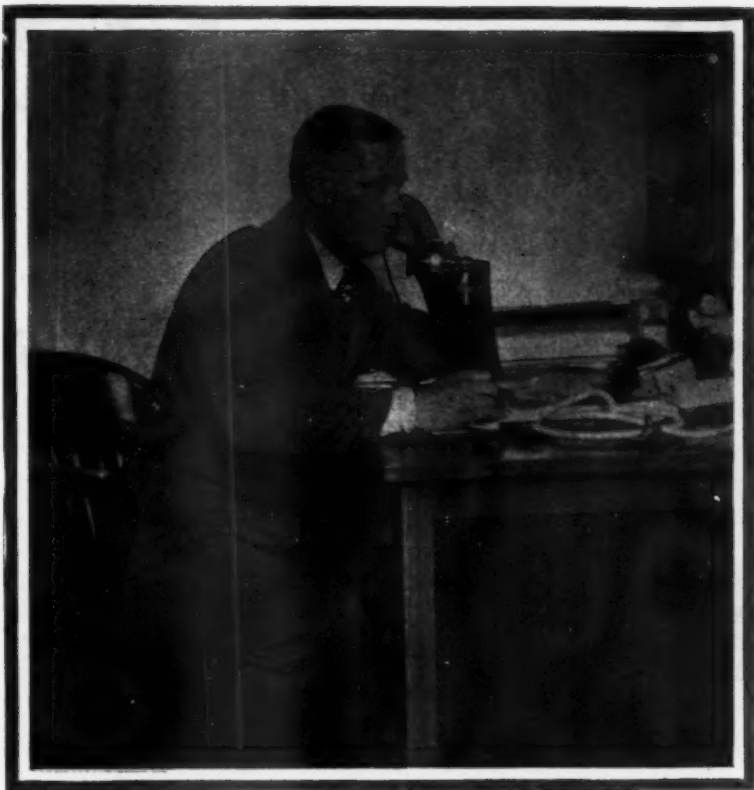
*Before
Selling*
Fixtures



Selling himself is an important part of Workman's scheme. He visits a house under construction and acquaints himself with the contractor and his work.

Passing from room to room every outlet is noted, with characteristics of the room in which each is located.





With the layout in mind and his notes at hand he communicates with the owner, who is surprised at the caller's knowledge of the house and willingly makes an appointment for himself or wife to inspect the fixtures designed for the type of home planned.

G . K . W o r k m a n

was one of the most prominent contractors in Fort Wayne, Ind., but deserted his shop to become a fixture expert with a larger contractor, the Barth Electric Company. Realizing that a large number of the very small house wiring contractors were not handling any fixtures, Workman secured their good will so that now he not only sells the fixtures for all the houses his company wires, but a large percentage of those wired by contractors who do not handle fixtures.

Nine out of ten of the prospects landed are women, Workman says, and they insist on fixturing the house in which they must live to their own taste and convenience.



Extra Light over Kitchen Sink
Cellar Light Pilot
Yard Light
3 and 4-Point Switch Control
Electric House Number
Radio Speaker Extensions
3-Point Radio Switch Control
Closet Lights
Pillar Lights at Entrance
Burglar Alarm
Tank Switches
Fan Outlets
Eight Light Outlets in Cellar
Range Wiring
Underground Service, Three
No. 2 Wires
Interior Telephone
Underground to Shop

3rd Switch to control radio on first floor

Burglar alarm

Bath

Bed Room

Bed Room

Bed Room

Balcony

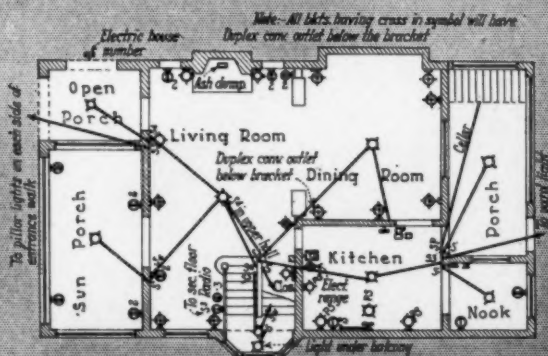
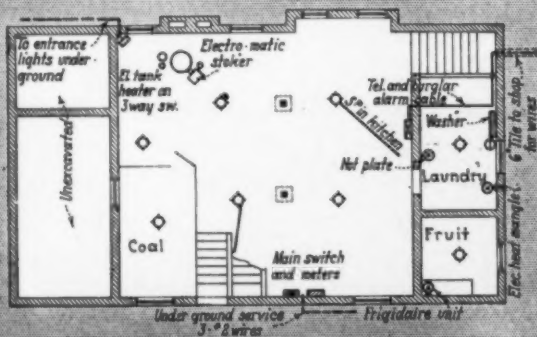
Radio speaker extension

Closet

Closet

Closet

Closet



TRANSFORMER VAULT

Structural Requirements

The Second of a Series of Articles on Industrial Substation Layout and Installation. The First Article Covering the Subject Generally Appeared in the January Issue. The Construction of the Vault (Covered in the Current Article) While Done by Another Class of Contractor, Must Be Understood by the Electrical Contractor Because He Will in Many Instances Be Called Upon to Lay It Out.—Editor

By CLOVIS M. CONVERSE

*Sales Engineer, G & W Electric
Specialty Co.*

THE space or "vault" set aside for an industrial substation should if possible be above ground with natural light and ventilation. A basement room or the space under the sidewalk, however, is often the only place available and may be ideal if proper access and ventilation can be arranged. In any case a strictly fireproof enclosure must be provided. The National Electrical Code specifies a min-

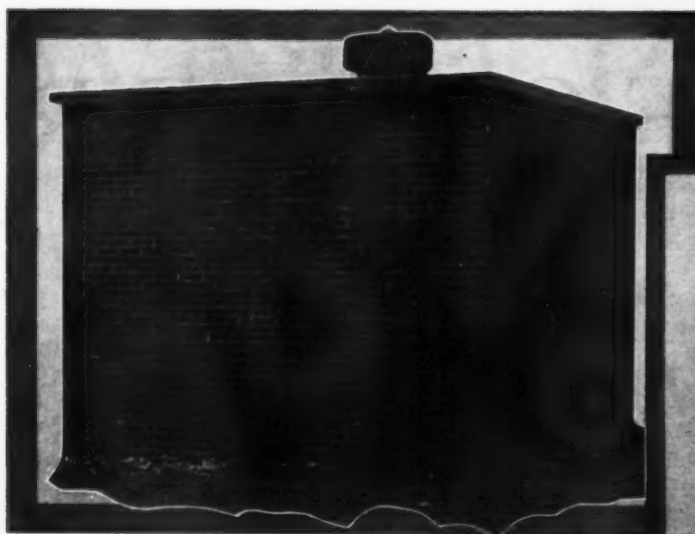
imum of 6 in. for a concrete wall or 8 in. for a brick wall. Floor and ceiling must be fireproof, preferably concrete slab construction. Most cities have definite requirements in their building codes covering transformer vaults.

To cut down on the space for transformer vaults is a serious mistake as a crowded vault is dangerous to operate at any time and especially in case of emergency. Furthermore such a vault leaves no provision for expansion which is often necessary and unexpected.

No fixed rule can be offered for the size of transformer vaults, but certain minimum requirements and suggestions can be given. A minimum height of 9 ft. should be maintained, the area should be sufficient to provide easy access to all equipment, leaving a clear space of at least 2 ft. around each transformer or other device. An aisle wide

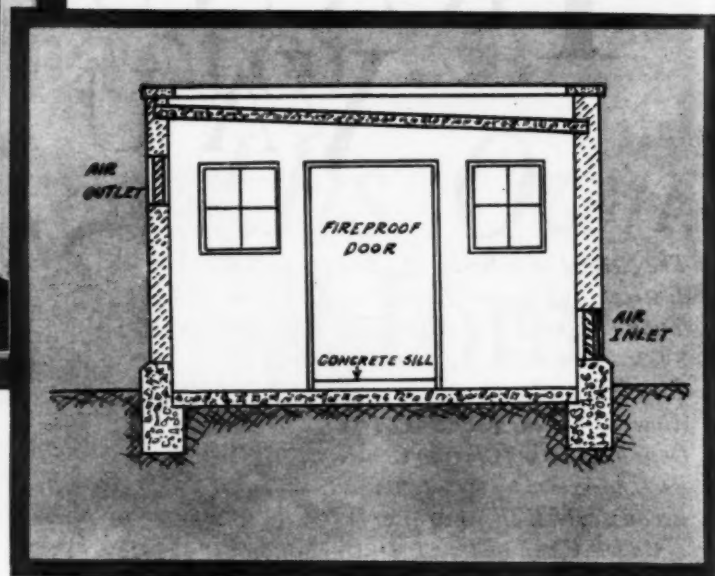


Section of vault showing inlet opening with louvers and outlet in ceiling. Note the fireproof construction and good general layout of transformers and bus structure.



Transformer house. Note ventilation openings indoor and outlet in roof.

Suggestion for small separate transformer house.



enough to permit the convenient removal of any equipment must be provided. A minimum area of 200 sq. ft. and a minimum width of 9 ft. are fair requirements.

Access to the vault should be direct to a street or alley if possible. If not, then the vault should open into a hall or passage of sufficient width to provide for the installation of equipment and its convenient removal. Basement vaults can sometimes be provided with a manhole frame and cover therefor.

The access door whether inside or outside, must

be of high grade fireproof construction, either sheet steel or steel clad of approved construction. Obviously locks must be provided to prevent unauthorized persons from entering. Often a hasp is provided and the utility supplies its standard padlock. It is suggested that approval of the door specifications be secured from the local inspection department. The door should be at least 4 ft. by 7 ft. in size and larger if necessary to provide for removal of equipment. Door must swing outward and the door opening provided with a fireproof sill at least 4 in. high.

The floor of the vault should pitch, at least $\frac{1}{4}$ in. to the foot, to a 10 in. floor drain centrally located. If this outlet for drainage is close to sewer level a backwater valve should be used. Where no drain can be installed, the door sill must be high enough to retain all the oil from the largest transformer.

Ventilation is a vital necessity and is more im-

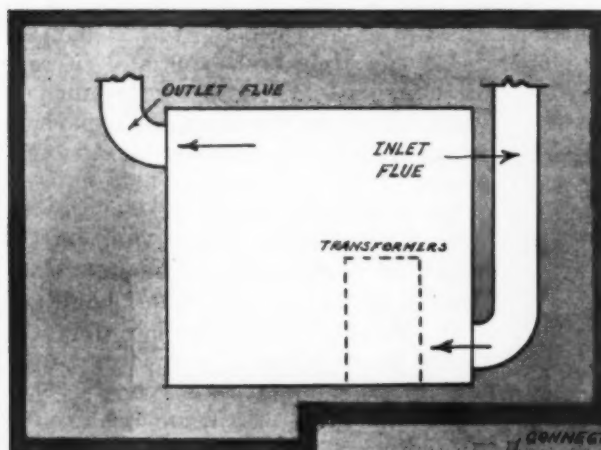
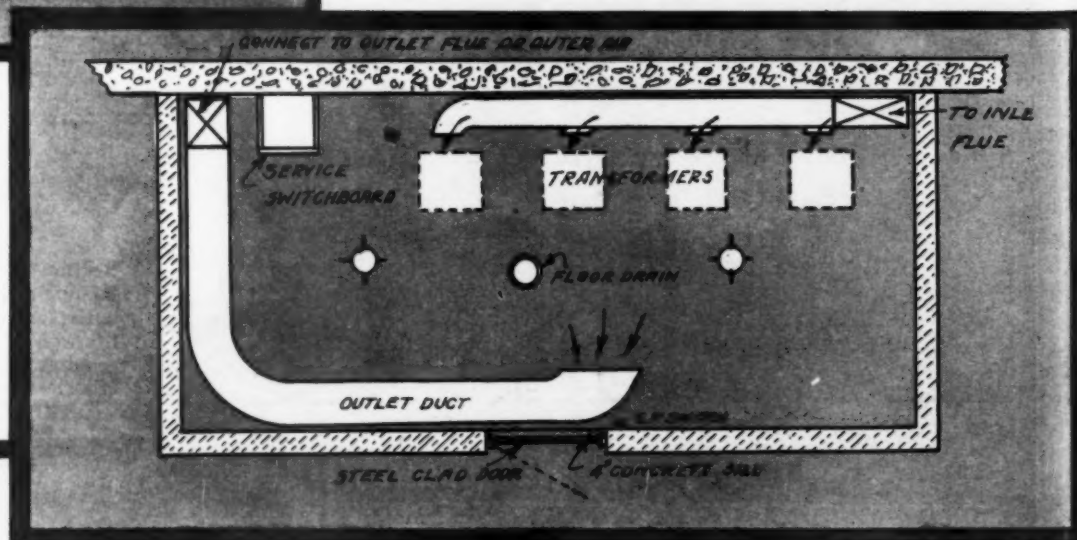


Diagram of ideal ventilation for small vault.

Plan of transformer vault with inlet for each transformer. Suitable for either natural or fan ventilation.



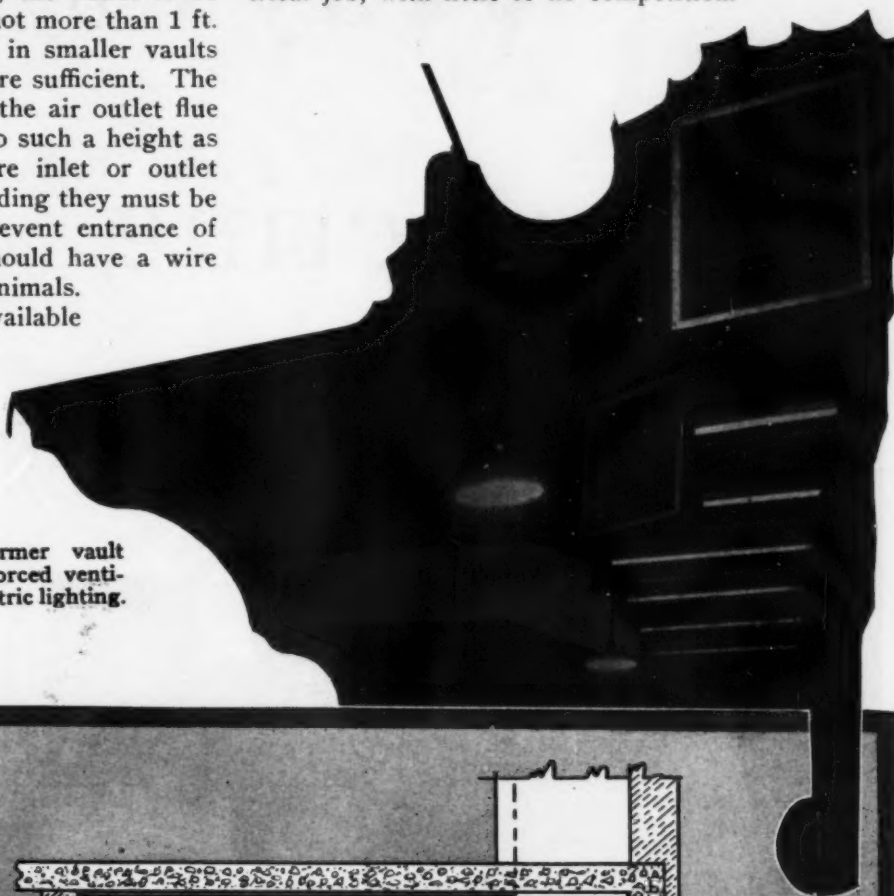
portant than many points previously mentioned. Sufficient fresh air must be provided to maintain the normal operating temperatures of the transformers and also to keep the vault dry. Sizes of ventilation openings and vent ducts will depend on transformer capacity and to some extent on the size of the vault and the duct arrangement. Obviously a small crowded vault will require more fresh air than a large open vault. A good rule is to allow a minimum of 3 sq. in. of duct section for each kilowatt of transformer capacity, no duct to be less than 1 sq. ft. in area. The ideal arrangement provides an air inlet duct not more than 1 ft. above the floor with openings behind each transformer, the outlet to be on the opposite side of room and not more than 1 ft. below the ceiling. In many cases in smaller vaults one inlet and one outlet opening are sufficient. The air outlet duct should connect to the air outlet flue or be carried out of the building to such a height as will provide proper draft. Where inlet or outlet openings are on the outside of building they must be provided with steel louvers to prevent entrance of rain or snow, and if accessible should have a wire screen to keep out birds or small animals.

When natural ventilation is not available ducts should be connected to building ventilation system or separate equipment installed.

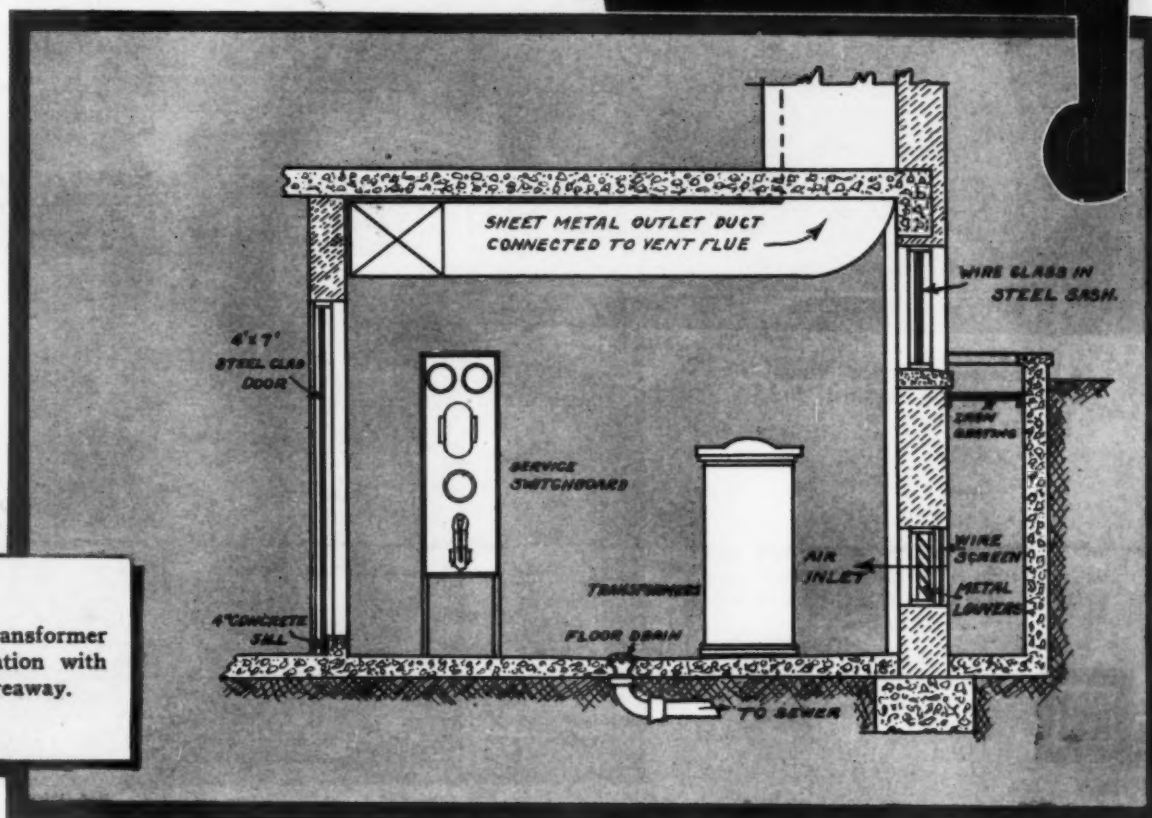
Artificial lighting of vault should consist of not less than two ceiling outlets controlled by

switch near entrance door. Outlets to be equipped with weatherproof fixtures, enameled steel reflectors and 100-watt lamps. Larger vaults will require additional light outlets. One or more plug receptacles should be installed, located conveniently for attaching portable inspection lamp, the wiring to be done in conduit in approved manner and connected directly to transformer secondary bus through a 30 amp. fused safety switch.

Discussion of the points brought out in this article with the owner or his architect when plans are being made, will often pave the way for the electrical contractor to secure a satisfactory and successful electrical job, with little or no competition.



Section of transformer vault showing ducts for forced ventilation, also note electric lighting.



Section through transformer vault showing ventilation with inlet opening in areaway.

Right *and* Wrong

Ways of

Connecting Armored C

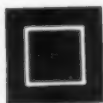
To Boxes



A common practice when working up against the ceiling.



This is what happens when the screw driver slips.



*Right Way Saves Time,
Gives Firmer Con-
nection and Therefore
Better Ground, and in
Addition Cuts Down
Number of Accidents*

d Cable



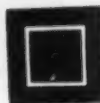
Do not try to fasten connector to cable with hand as support. Not only is screw driver liable to slip and cut the hand but it is not possible to get as tight a connection as one could with a firmer backing.



The right way is to first lock the connector in the box, and pull in the armored cable.



Then tighten up on connector. The fitting being rigid, it is possible to make a very tight connection and a good ground.



Happiness Preferred

*Spending for Employees' Comfort
is a Good Investment, According to
Harry Binder of Omaha*

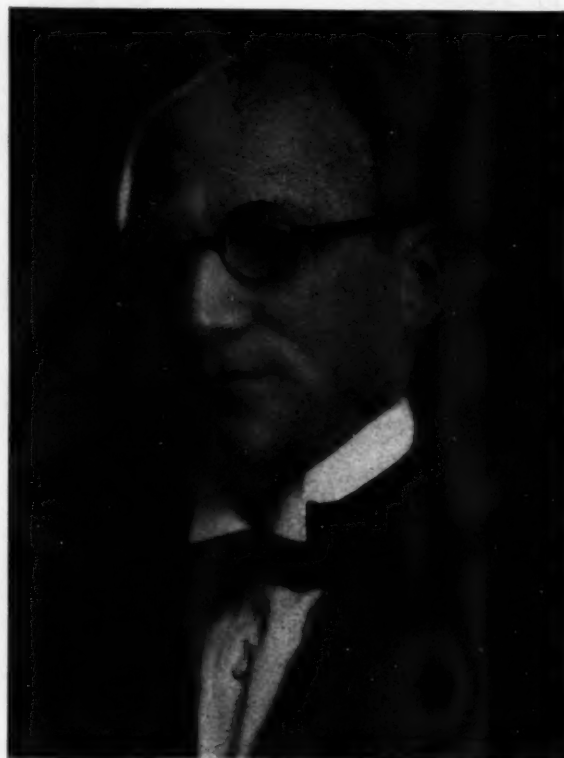
PROVIDING better conditions for wiremen is not exactly a new departure, yet the experience of a contractor who has gone the second mile with his men should encourage those employers who have honestly tried to better conditions for their help, only to become discouraged because of obstacles or lack of gratitude.

Harry Binder, head of the Harry M. Binder Co., Omaha, Neb., started soon after he entered business to do more for his men than was legally required of him. While there had to be a humanitarian motive back of it all, Mr. Binder says it is not philanthropy but sound business, an investment that eventually returns a dividend in the shape of better work and more profit.

Granting that there is conscience and a desire for fair dealing on both sides, there is no denying the fact that the most important feature in the relations of the contractor and his men is the well-known pay-envelope.

Wiremen are paid by the hour and ordinarily this pay stops when the work in hand peters out or is postponed. Thus a man may report in the morning, after travelling some distance to the job, carrying a lunch prepared by his wife and all set for a day's work. Then something happens to hold up the work. He goes home in the middle of the day,

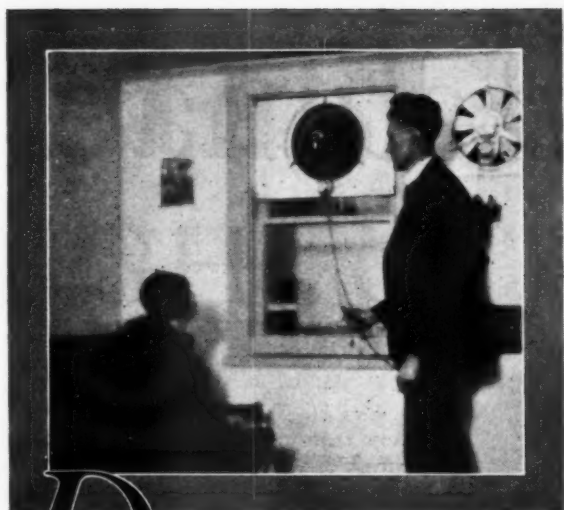
(Continued on page 120)



Harry M. Binder

The kind of men who respond to fair treatment. Binder's three foremen: Left to right, Art Cronemeyer, Bill Ratliff and A. C. Krell.





Mr. Kelly demonstrating a kitchen unit to a customer. The partition is fitted with a duplicate of an ordinary window, allowing the prospect to judge appearance as well as efficiency.

Demonstration Sells Ventilating FANS for KELLY

A simple yet effective system for building ventilating fan business has been developed by E. B. Kelly & Co., Minneapolis electrical contractors. In addition to providing up-to-date outfits for demonstrating, a record is kept showing the day-to-day saleswork on all styles of fans.



Portable demonstrating outfit closes sales. J. R. Abrahamson, one of the salesmen, starting out with the demonstrator, which was designed and built in the company's shop. It is made of wall-board, brass-bound, with a suit-case handle and legs taken from display boards. The fan can be quickly removed and another inserted.

VENTILATING FANS		
SALESMAN	DEMONSTRATION TRIAL	SOLD
Kelly		
Castner		
Abrahamson		

Blackboard record in office provides constant stimulant to salesmen. On the hooks opposite each salesman's name are cards showing demonstrations and fans on trial but not sold and in another space those closed.

Name Fred Baker
 Address 1027 Central Ave. Ph. No. 501 502
 Occupation Drugs & Ice Cr. Ph. No.
 Business Address Same
 Salesman M. J. Cantner
 Date on trial July 20 Sold Aug 2 1921
 Kind of Window Tight?
 Distance to socket 12 ft. 2-way Plug 1
 Remarks Change to H. D. motor 1/2
 Wants to try both
 1140 Installed 7/20/21 MJC

This card (here shown) is made out in triplicate. One for the board, one for the salesman to make entries on and one for the office, which is filed when sale is completed.

Keeps Estimating

with



Boy reports to job foreman just before work for the day has been completed. He is shown copying data from the foreman's book, the time on each job having been noted during the day by the various electricians.



Foreman points out the kind of work the men have been on during the day. The boy, who each day acquaints himself with the work to be pursued the following day, observes closely.



With the foreman looking on, boy makes crayon mark on layout showing exact location of completed work. He is taught precision in this operation.

Up-to-Date HIGH SCHOOL BOYS

In an effort to keep a more accurate record of estimating data, the Harmon Electric Company, Chicago, employs high school boys, who are pursuing courses leading to accountancy. In the "Time Study for Estimating Data" labor operations are segregated into each unit of electrical work, making it possible to revise estimating data frequently and submit nearly perfect estimates. The profit gained easily covers the amount expended in hiring the boys, whose work consumes less than two hours a day.



On returning to the office of the company the boy neatly copies the data in a permanent record book. Index and one page from this book shown.

Secretary of company, H. L. Winograd, uses data to make an analysis of time study of labor, in which each operation is segregated for various sizes to obtain a unit cost for each size, as shown on page for conduit.

DETAIL SHEET NO. 1

DETAIL SHEET NO. 2

DETAIL SHEET NO. 3

DETAIL SHEET NO. 4

DETAIL SHEET NO. 5

DETAIL SHEET NO. 6

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DETAIL SHEET NO. 97

DETAIL SHEET NO. 98

DETAIL SHEET NO. 99

DETAIL SHEET NO. 100

Conduit

12.00 Scale Factor for
Standard Size

SIZE	MATERIAL	Cost per M. Foot	Value	Old Cost	New Cost	Ratio
1/2"	Bldg.	56.92	106	107	108	1.02
3/4"	Bldg.	72.65	107	108	109	1.02
1"	Bldg.	104.17	109	110	112	1.02
1 1/2"	Bldg.	148.94	111	112	115	1.02
2"	Bldg.	168.51	115	116	118	1.02
2 1/2"	Bldg.	226.72	122	122	122	1.00
3"	Bldg.	358.46	126	126	126	1.00
3 1/2"	Bldg.	468.76	131	131	131	1.00
4"	Bldg.	589.95	137	137	137	1.00
4 1/2"	Bldg.	719.68	145	145	145	1.00
5"	Bldg.	838.53	---	---	---	---



Electrical Contracting

With Which Is Incorporated The Electragist

S. B. WILLIAMS

Editor

Yessed to Death

ALL salesmen know that the hardest person in the world to sell is the fellow who agrees with everything you say. He kids you along and makes you believe that you are going to get a nice fat order but in the end all you get—is nothing.

We are beginning to wonder if the industry sales promotion program, and with it the trade extension institute for contractors, isn't being yessed to death. First, the committee meets and they are for it. The trade press is for it. Industry leaders speak in favor of it. Associations favor it. A sum of money is raised for a preliminary study and a report made. Rumors are heard on every side of large sums to be spent, then all is quiet and rumors come of smaller and smaller and still smaller sums. Is the industry sales plan being yessed to death?

Certainly the sums that are now being mentioned offer no place for a trade extension institute for electrical contractors. Has this, too, been lulled to sleep in that blissful game of yessing it to death?

Industrial Plant Maintenance

ONE of the worst competitors that an electrical contractor has is the plant or factory electrician. He is holding down a job that an electrical contractor ought to be doing and the factory owner is paying him more and getting less than he would from a contractor.

Figure it out! The contractor's job is to make a profit on labor. Therefore, he supervises labor and sees to it that there is a reasonable production. Who supervises the factory electrician? He doesn't have to make a profit on his job.

Frequently, the plant electricians are men who can't stand the competition of holding down a job with a contractor, where good work and production counts. Certainly all they know is the mechanics of wiring, and little or nothing about the economics or engineering of wiring. They have nothing to pay for if something they do goes wrong.

The most efficient manufacturing group in the world is that producing automobiles. Almost all of the automobile plants in Detroit have switched from factory electrical departments to electrical contractors for wiring and maintenance. Why? Because the electrical contractor does the work better, quicker and for less money.

The factory electrician is an economic waste. Look into this field. There's money in it if you know how to sell it.

Special Rules

WE stand for standardization; but we also stand for progress. We believe in the National Electrical Code; but we recognize that it is a code of minimum safety.

We deplore any departure from the National Electrical Code (1) that calls for special products, (2) that is contradictory to the Code, (3) that sets up a barrier to the use of any product as permitted in the Code. At the same time we applaud local ordinances that commit none of these transgressions, but go beyond the Code in calling for better wiring.

The Code builders need local testing laboratories if the Code is to keep abreast of the art, and therefore every encouragement should be given to those localities which are desirous of improving local wiring conditions through such special rulings.

We know that the wiring of today is not only inadequate for today's needs, but dangerously inadequate for tomorrow's loads. Special rulings looking to the load that is

going to be placed a few years from now on the wiring installed today is, to our way of looking, a far-seeing, broad and progressive action.

It is our hope that we may soon see No. 14 wire banished for branch circuit purposes and that no service smaller than three No. 6's will be permitted.

These improvements may cost a little now at the start, but they will not act as a hurdle to future development of the industry as is now the case, particularly with ranges.

Get Behind

Detroit Credit Plan

THE Detroit Credit Plan has taken root in the East. New York City is about to put it in operation as is also Newark, N. J. Boston is more than interested. Numerous

other places are considering the plan and we urge the contractors in every important city to lose no time putting it into effect.

Already there is opposition to the plan from other interests, for one reason or another, but we rather think that the basic reason for opposition is prompted, not by any desire to help the situation, but by the fear of decreased volume.

The Detroit Credit Plan, or some similar credit plan, is the legitimate contractor's only salvation. Cut-throat, below-cost competition cannot survive "30-day credit," or "cash." Speculative builders cannot finance their operations on sub-contractors' money if the latter have to pay their bills promptly.

When properly administered the Detroit Credit Plan works, and we urge the contractors in every important center to insist on its adoption. If there are certain jobbers who prefer to regulate their own credits, let them do it with such contractors as are unwilling or unable to pay promptly.

A Message to Electragists

ORGANIZATIONS are for the purpose doing for each other collectively what the individual would like to do but can't do alone. The strong associations are those which hold to this purpose. Associations which wander away from this purpose become impotent.

The policy of being a good fellow, of trying to "play the game" with the rest of the industry, has been absorbing most of the strength of the Association of Electragists. It has been spending too much of its time up blind alleys.

It is time for the Association of Electragists to turn over a new leaf. It needs to spend less time in contact with the industry and more time in contact with its members. It needs a new program—a new objective.

The contractors of this country can expect nothing from the electrical industry nationally. Any policies that other national bodies may enact have no weight except as their own members may accord them in their own localities. The solution of the contractors' problems, therefore, is a local matter and their national organization, consequently, must be set up to help them organize locally in a way that will be profitable to the contractors.

Local problems are not all different.

Therefore, there are problems that the national organization can solve once for all the locals.

We therefore urge the Association of Electragists:

1. That it withdraw from all electrical industry alliances and industry conference work and devote all of its time, money and energy to the interests of its members only.

2. That it vote to tackle one or two problems of the electrical contractor each year and let nothing prevent it from finishing those problems.

3. That it set apart a certain large amount of its time and money for the purpose of helping local chapters to organize in a way that will be of real benefit to the members.

4. That the staff and officers be required and pledged to make more contact with members to the end that members, by a better understanding of the work and policies of this national body, become proud of membership.

Today the Association of Electragists is out of debt—for the first time in years. Its membership is the strongest ever.

Let it no longer be a cat's-paw for friendly organizations. Nor let it carry any longer the burden of accounting for the sins of the contracting industry. Let its sole job be that of working for its members and helping them get what they want, when wanted.

Code Chats

A Monthly Discussion of Wiring Practice and Questions of Interpretation, Presented with a View Toward Encouraging a Better Understanding of the National Electrical Code - - -

Conducted by F. N. M. SQUIRES

Assistant Chief Inspector, N. Y. Board of Fire Underwriters

Electrical Fires and Their Causes

Below is a partial list of electrical fires reported by the electrical bureau of the New York Board of Fire Underwriters as occurring in the City of New York during 1928. These fires are compiled from the records of fires for which alarms were turned in to the city fire department. The fires included in this list are only those whose origin have been proved to be electrical beyond any doubt.

The largest of those shown, both numerically and financially, is one for which there is no defense and one which is to be condemned the most—"Flexible cord used for circuit work."

Flexible cord as here described is clearly a serious violation of the Code and is probably the one condition most damned by all inspectors. This violation of Code rule 614-a is the one which probably is the most frequently found by inspection departments and the one for which most of the buildings which are rated electrically defective are paying the highest unsafe insurance charge, as this defect is considered most dangerous.

Crowding Wires

Our contentions about the dangers of crowding wires together being hazardous are borne out by the figures for losses for "conductors in gutter space." The Code allows but nine wires to be grouped together in a conduit but in the gutters of panel boards and of cutout boxes we often find great tangles of wires. We have, in these columns, objected to excessive num-

bers of wires in junction boxes and troughs and the condition mentioned here should be included.

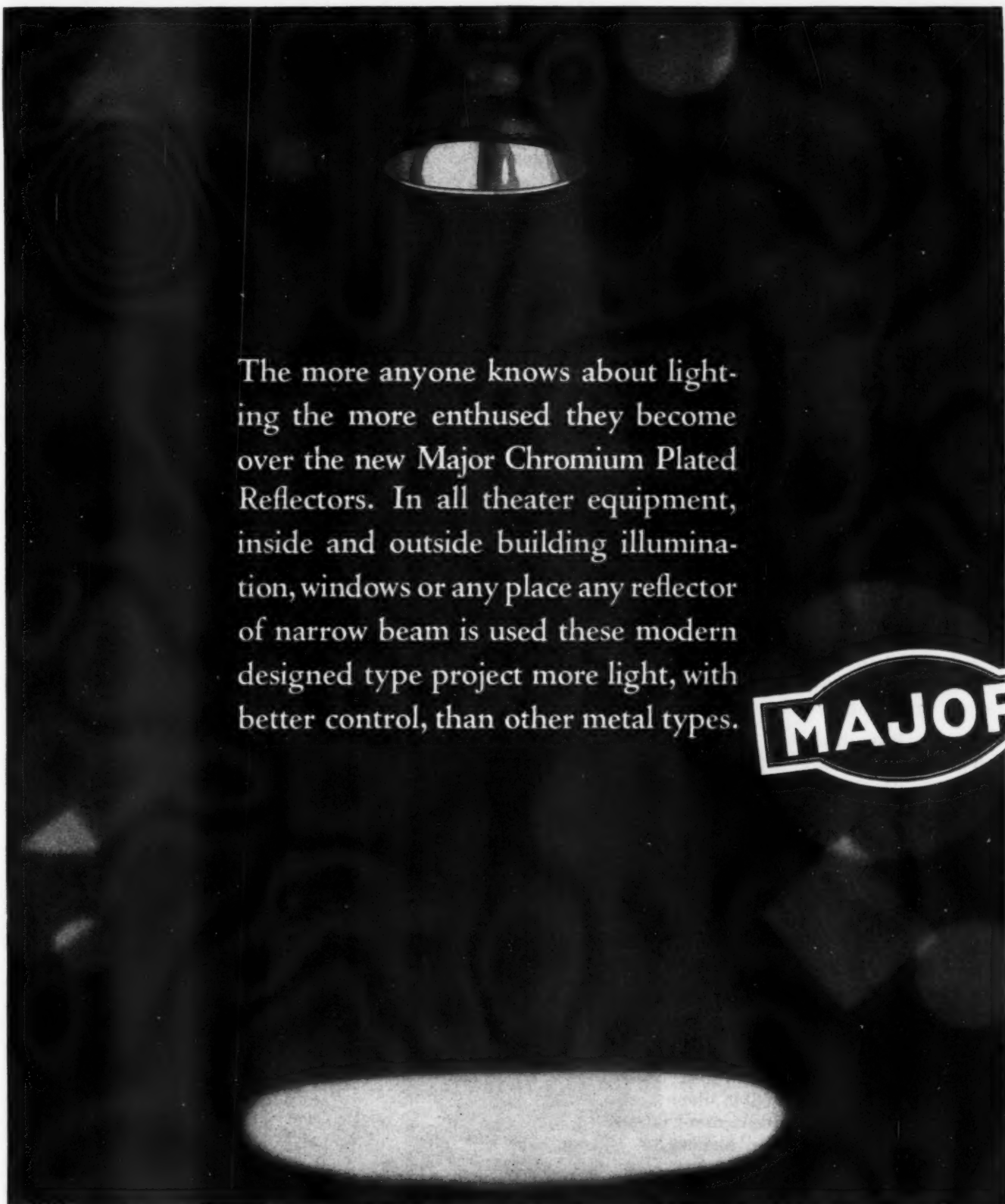
Next we notice "Heating of armor of interior cables." Let us hope that from this the cable manufacturers and the Laboratories will recognize the need of getting back to a heavier armor. Let us respectfully remind them that the war is over and of the necessity of

a return to normalcy. Many inspectors have for some time been calling the light armor of the present cables "heater coils."

Next note "Fuse operation." Would this item have been here if the future 0-15 ampere non-tamperable fool-proof fuse had been in use? Possibly a few of these were from fuses of heavier types but had the Code faithfully been ad-

Record of Electrical Wiring Fires in New York City in 1928

	FIRES	LOSS
Contacts defective	21	\$ 769.00
Conductors in conduit	12	2,625.00
Conductors in gutter space.....	33	11,835.00
Conductors exposed to moisture.....	14	353.00
Conductors in wood moulding.....	3	226.00
Cables armored: Current entering building over the service conduit hence to interior ground connection	2	200.00
Heating of the armor of interior cables.....	31	5,852.00
Disturbance in equipment during thunder storm....	1	2,500.00
Disturbance in rear of elevator panels.....	8	811.00
Disturbance in telephone switchboard.....	1	75.00
Fuse operation	24	1,914.00
Flexible cords: Free in the air as pendants.....	2	51.00
Used on chain fixtures.....	6	135.00
Used on floor lamps and hand portables.....	9	1,155.00
Used for circuit work.....	93	47,261.00
Used on pressing irons.....	4	233.15
Motors and Generators: Disturbance in winding...	92	8,564.00
Motor Sparks	24	13,682.00
Domestic refrigeration	28	1,310.00
Radio: Receiving sets.....	52	18,444.00
Receiving sets during thunder storms.....	7	685.00
Short circuits: Accidental.....	38	9,031.00
Elevator cables	15	1,874.60
Sockets and receptacles.....	19	1,018.00
Splices at outlets.....	63	1,958.00
Christmas tree sets.....	15	5,525.00
Electrically operated toys.....	9	8,276.00
Signs: Incandescent lamp type.....	12	952.00
Gas filled glass tube type.....	6	3,625.00
Transformer in vaults.....	27	1,000.00



The more anyone knows about lighting the more enthused they become over the new Major Chromium Plated Reflectors. In all theater equipment, inside and outside building illumination, windows or any place any reflector of narrow beam is used these modern designed type project more light, with better control, than other metal types.



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Winnipeg, Man.

hered to in the use of these, we dare say this item would have been very small.

Ninety-two fires were laid to "Motors and Generators. Disturbance in winding" show the need of better motor protection as required in the later editions of the Code. We must remember that there are lots of motors which were installed before these requirements became popular.

"Motor sparks" shows the need of screening the hand holes on the commutator or ring end of motors—also the necessity of "house cleaning" around motors.

The next item, "Domestic Refrigeration," is one which is assuming alarming proportions. Due to the large amount of smoke given off when disturbances in refrigerator motors are taking place, they are quickly discovered and, therefore, so far, the losses have not been very heavy. But some safeguard is very much needed here and we believe that the small circuit breaker is the safeguard needed and that it will be required before very long.

Radio Hazards

The next item immediately following is "Radio Sets." This is one which will bear watching. With the increase in the popularity of the "electric radios," we must watch out for all kinds of troubles—abuse of flexible cords, poorly ventilated wooden cabinets, containing transformers, tubes, chokes, etc., which develop considerable heat, poor insulation for the voltages encountered, etc., and now with the "remote controlled" sets with their wiring installed by the average "radiotrician," whose Code knowledge is limited to the requirement for a lightning arrester on an outside aerial, our hands are going to be full.

Under "Short Circuits" we find thirty-eight listed as accidental. There is nothing to indicate that the rest of the one hundred and sixty "shorts" were intentional but are at a loss to know just how to discuss these thirty-eight. But "Splices at outlets" is clearly a Code matter. If these splices had been properly insulated and had been given sufficient room in the outlet boxes, these disturbances

should not have happened. Maybe the inspection department should be more strict about the quality of the tapes used. Let us hope also that the requirement of 1½ in. depth for all outlet boxes will help to alleviate this condition.

* * *

Elucidation of Grounding Rule

A question has arisen as to the interpretation of Code rule 905-C.

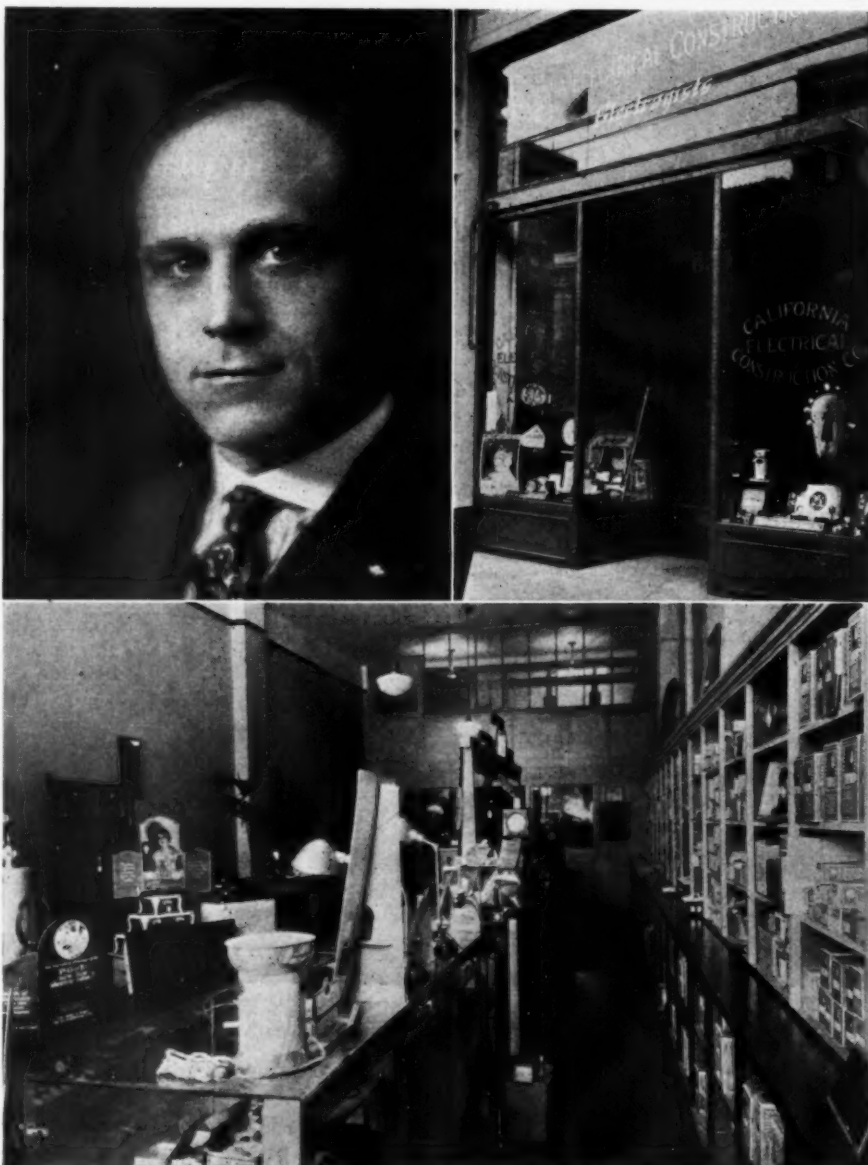
This first says that the *copper conductor* used to ground the system may be used to also ground the service conduit, service cable sheath, equipment, and the like, providing that this copper conduc-

tor is grounded to a continuous metallic underground piping system at two or more locations, which locations are not to be in the same building. This, of course, refers to A. C. systems only, as a D. C. system does not have a system grounding wire in each premise.

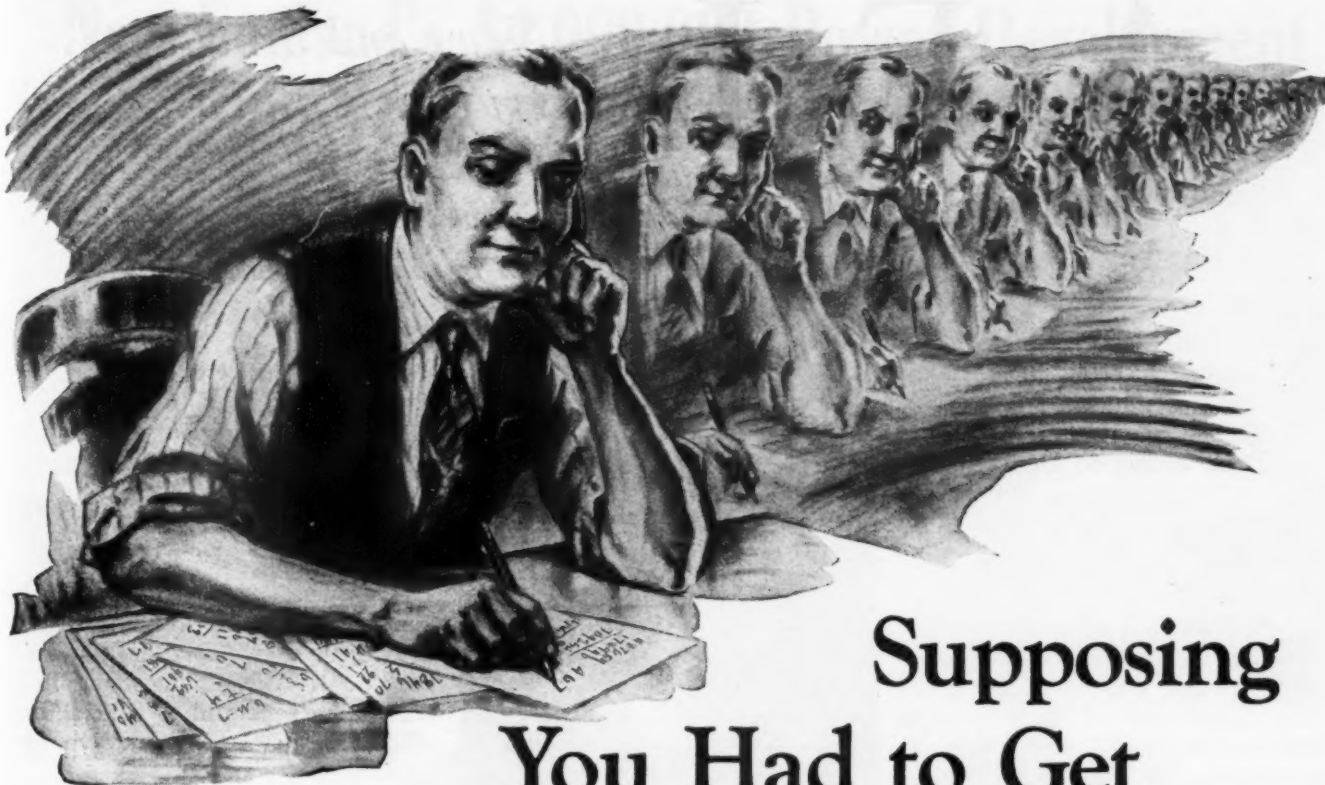
By "equipment and the like" is meant the armor of conduit, armored cable, metal moulding, electrical metallic tubing, etc.

"Copper conductor" is mentioned above because rule 906-A requires that copper be used for grounding a wire of the system, though the grounding conductor

(Continued on page 119)




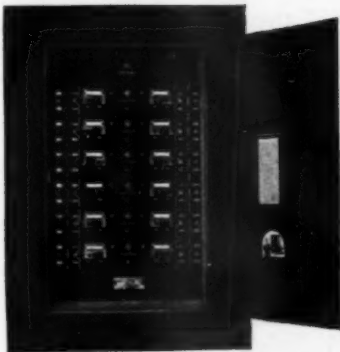
OFFICE AND STORE OF ELECTRAGISTS' PRESIDENT:—Clyde L. Chamblin, president of the Association of Electragists is a successful contractor-dealer in San Francisco, Cal. He takes pains to make the new store and offices of his company, the California Electrical Construction Co., a model for a moderate size business. His contracting offices, it will be noted, are at the back of the store on a mezzanine.





Supposing You Had to Get All the Details Yourself!



Even if it were possible (and it isn't) it would mean above all else delay and possible loss.

Particularly on the larger jobs, panelboard—and switchboard—details are especially complicated. Fortunately you are never involved in this needless and almost endless detail, for there are thirty  district offices, centrally located, ready to serve you.



◎ PANELBOARDS are dead faced panelboards. They cannot be changed by careless workmen nor tampered with by self-elected experimenters. Isn't that a feature?

The  Panelboard man, in the  district office near you, will clear your desk of panelboard worry. He will furnish data, detailed estimates and all other helpful information. And he will render this service entirely free of charge to help you get business.

Hundreds of electrical contractors, the country over, use this  service almost daily. It has proven bigger business for them, it will prove itself to you. Learn to use it. Call, or write, the  man today!

AND ANOTHER THING—We have a catalog which is really more of a data book and panelboard encyclopedia than an ordinary catalog. You need it on your desk. It's free—just write for it.

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Winnipeg, Man.

A. E. I.

*News and Service
Information*

*Material for this department is supplied by the headquarters staff of the Association of Electragists, International,
420 Lexington Avenue, New York, N. Y.*

Two Ways to Become Chapters

Local associations of electrical contractors may now become chapters of the Association of Electragists in one of two ways, either as a chartered chapter or as an affiliated body. The charter plan takes care of those groups which want to designate their association as the "So-and-So" Chapter of Electragists. The affiliated plan takes care of incorporated locals and those bodies which wish to retain their own local association name.

The two application forms are practically identical except that the use of the term "Electragist" with the corporate name of an incorporated local association is qualified. Under both plans the local chapter must be 100 per cent A. E. I. members.

* * *

Standard Mechanics' Lien Act

Word is received from the secretary of the Standard State Mechanics' Lien Act Committee of the United States Department of Commerce that the comments submitted regarding the Second Tentative Draft and the Supplement distributed for consideration last year, have been collated and sent to the committee members for consideration; but that the committee has had no additional meetings, and no action has been taken at this date.

The A. E. I. is opposed to the Supplement proposing changes in the Second Tentative Draft, on the grounds published in November, 1928, issue of "Electrical Contracting."



VISITS FIFTEEN CITIES:—Lawrence W. Davis, general manager of the A. E. I., has just completed a three weeks' trip covering fifteen cities in the interests of chapter organization. His trip included Baltimore, Washington, Pittsburgh, Youngstown, Detroit, Grand Rapids, Milwaukee, Chicago, Orlando, Jacksonville, Savannah, New Orleans, Memphis, St. Louis, Kansas City, and Marshalltown. At Grand Rapids Mr. Davis addressed the Michigan Association of Electric Inspectors and in Chicago he attended with L. E. Mayer, A. E. I. executive committeeman, the National Conference of the Allied Construction Industries Committee. On February 22 he was the speaker at the Florida State Convention of Electragists at Orlando and on February 25, was the speaker at a luncheon of the New Orleans Chapter of Electragists. From there he went to Memphis and addressed the newly formed Chapter in that city and the following day was the speaker at the weekly luncheon of the St. Louis Electrical Board of Trade, on the subject "Unsound Competition is the Death of Trade." Mr. Davis reported that in every city he visited he found a keen interest in the development of a credit plan similar to that in effect in Detroit and a number of the cities are ready to put it into effect.

Cost of Doing Business

Questionnaires on the Cost of Doing Business and Profit and Loss have been sent out to the A. E. I. membership. The form is somewhat different this year from previous years and it is expected that the results when compiled, will be very helpful to contractors who wish to check their own figures.

* * *

Apprenticeship Training

The A. E. I. is studying a program for the encouragement of apprenticeship training in all cities large enough to adequately supply suitable training programs through cooperation between the various branches of the industry, the Federal and State boards of vocational education, and local boards of education.

In 1917 there was passed a Federal law which is known as The Smith-Hughes Act, which provides government aid for vocational educational training of apprentices under the following conditions:

1. The instruction must be given in a school under public control.
2. The state or the local community must provide sufficient equipment for successful instruction.
3. The state or the local community, or both, must give dollar for dollar with Federal funds.
4. At least one-third of the appropriation made to any one state must be used for part time day classes suitable for apprenticeship training. These part time classes must provide not less than one hundred forty-four hours of school training per year.
5. Night schools, to secure Federal aid, must confine the instruction to that which is supplemental to daily employment.
6. The local communities asking for "Smith-Hughes" aid make their reports each year to the State authorities, who in turn, file re-

New England's \$4,000,000 Power Development UNION FUSE PROTECTED



New England Power Company's development which generates an electric current of 60,000 h. p. for cities and towns nearby.



The UNION-GEM
JEFFERSON Line
Is Sold Through
Wholesalers

WHEN careful consideration is given to electrical protection, Union Fuses are invariably the choice. The New England Power Company, for example, protects the circuits in its \$4,000,000 power development with Union Renewable Fuses.

Since the early days of electric power, industry has chosen Union Fuses because of their quality, dependable protection, and low maintenance cost.

Simplified design and rugged construction keep Union Renewable Fuses serviceable after repeated blowouts. The extra heavy and tough grey horn fibre case is

vented by an exclusive method. Vents, scientifically proportioned, relieve the pressure generated when the fusible element blows and prevent the molten metal being forced into end caps and threads.

In the knife-blade type, shown above, both ends of the fusible link are notched to make replacement of fuse link easy. In the ferule type, links are bent at one end for the same reason.

For proper protection and efficiency of motor-driven equipment, lighting and power circuits—and lower fuse costs per year—specify Unions. There is a type and size for every need.

A Great Convenience

The fuse chart is a necessary guide to the proper selection of fuses. It enables you to tell the proper size at a glance, for the adequate protection of motors, and the new Catalog No. 33 explains why Union Fuses give long life and dependable protection. Write for copies of both.

Chicago-Jefferson Fuse & Electric Co.

1503 WEST 15TH STREET
Chicago, Ill.

UNION FUSES

Because they are worth more they really cost less

(8903)

ports with the Federal Board. The United States Treasurer pays to the State Treasurer the entire aid for the State. The State Treasurer, on requisition from the State Board, sends the money on to the School Board of the communities which operate approved apprenticeship classes.

A. E. I. local chapters planning to undertake a program of apprenticeship training in their communities can secure information regarding the procedure for securing government aid by writing to the Association headquarters.

* * *

State Arbitration Laws

The A. E. I. is supporting state arbitration bills recently introduced in the legislatures in the states of Arizona, Colorado, Indiana, Maryland, New Hampshire and Texas. Similar state arbitration laws are already on the statutes of New York, New Jersey, Massachusetts, California, Pennsylvania, Oregon and Louisiana.

The legislative committee of the A. E. I. recommends that all other

states work toward the securing of enactment of the Draft State Arbitration Act, since without such state laws arbitration is not uniformly applicable throughout the country.

The A. E. I. also recommends that a clause be inserted in all contracts agreed to by its members, providing that any controversy or claim arising out of or relating to such contracts, or for the breach thereof, shall be settled by arbitration.

When parties voluntarily agree to arbitrate all future disputes arising out of a contract and insert a clause to that effect, or submit to arbitration an existing dispute, such agreements are valid, irrevocable and enforceable in the same manner as any other agreement.

When a party refuses to comply with or perform an award, the Court is required to enter judgment thereon, unless there is proof of misconduct or bias by the arbitrators or if they have exceeded their authority.

Big Demand for Local Chapters

With the completion of the application forms for becoming Electragist chapters, there has been a flood of inquiries from locals all over the country. Already a number of applications have been received and it is now apparent that the A. E. I. membership, as a result of the chapter plan, will reach new high records by spring.

Since last month's issue negotiations for affiliation have been opened from Minneapolis, Portland, Ore., Atlanta, Ga., New Orleans, La., Saskatoon, Sask., Canada, Canton, Ohio, and a large number of Florida centers including Miami, Palm Beach County, Tampa, Seminole, Osceola, Lake, and Orange counties, Daytona Beach, and Jacksonville. Among the new inquiries which have been received are Denver, Colo., Lima, Ohio and Savannah, Ga.

Affiliation of the Electrical Contractors' Association of Chicago has been completed.

NEW ELECTRAGISTS

The following contractor-dealers have made application and been accepted into the A.E.I. since the publication of the list in the February issue:

FLORIDA

Daytona Beach:
Gee Vee Electric Co., Inc.
Daytona Electric Co.
Malone Electric Co.

Orlando:
Curry-Ensign Electric Co.
Newell Electric Co.
Johnson Elec. Co., Inc.

Sanford:
Sanford Elec. Constr.

Tampa:
George H. Bell
Hale & Buerke Co.

West Palm Beach:
Burkhardt's Radio & Elec. Shop
Capitol Electric Co.
C. R. Carman Elec. Co.
Electric Service Co.
Arthur Hamilton, Jr.
Harper Electric Co.
Electric Power & Equip. Co.
J. R. Jordon Elec. Co.
McDonald Electric Co.
Trojan Elec'l. Supply Co.

ILLINOIS

Chicago:
A. C. Electrical Co., Inc.
Berry & Company

Beverly Electric Shop
Bond & Lehman Co.
Burgard Elec. Co.
Casey Elec. Service Co.
Commercial Light Co.
H. W. Craven
Curtis Lighting, Inc.
Davies Electric Co.
Dearborn Elec. Constr. Co.
Divane Bros.
Edward Elec. Co., The
Edwards Elec. Constr. Co.
Edwards Lighting Fixture Co.

Electrical Contracting Co.
Harry E. Entler
J. F. Fisher & Co., Inc.
Fullerton Elec. Shop
Gibson & Nicholas
Harmon Elec. Co.
Hub Elec. Co.
Humboldt Lighting Fixt. Co.
Hyre Elec. Co.
K. & P. Elec. Co., Not Inc.
J. Livingston & Co., Inc.
Meade Elec. Co., Inc.
R. S. McMillan
Henry Newgard & Company
Rightway Elec. Constr. Co.
Jas. E. Rust Elec. Co.
Southwest Elec'l. Sales Co.
A. S. Schulman Elec. Co.
Sweningson & Co.

J. P. Szymanski
Thomas Elevator Operating Co.
Uhl-Slauson Elec. Co.
U. S. A. Company
Wadeford Elec. Co.
Wagner Sign Service
Walter G. Warren & Co.

MINNESOTA

Minneapolis:
Sterling Electric Co.

NEW JERSEY

Livingston:
Leon C. Fund, Inc.

NEBRASKA

Omaha:
Howard W. Granden

NEW YORK

Kingston:
A. H. Clark
New York City:
Harry Alexander, Inc.
Alliance Elec. Co.
Blackall & Baldwin Co.
Burkart Elec'l. Co.
Cleveland & Ryan
E-J Elec. Installation Co.
Albin Gustafson Co.

J. L. Goodrich
Engert-Hellman, Inc.
Erickson Engrg. Co.
Fischbach & Moore, Inc.
Lindsay-Wright Co.
John P. Morrissey, Inc.
Regent Elec. Constr. Co.
William Liebfried Co.
Miller Brown, Inc.
John H. Hooley
Robert E. Denike, Inc.
Watson-Flagg Engrg. Co.
Lewis H. Woods, Inc.

Long Island City:
Austin & Moore, Inc.
William T. Dippel, Inc.
Thompson-Starret Co., Inc.

Syracuse:
Smith & Zogg

OHIO

Dayton:
The Kelso-Wagner Co.

TENNESSEE

Memphis:
Frank O. Davis
Hill Electric Co.
Gray Brothers

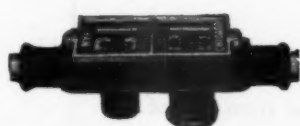
THE CELEBRATED SKIP TOOTH DIE

(Genuine Nye)

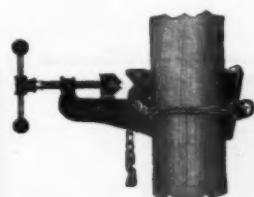
A Letter from Harry G. Nye



To the Electrical Contractors of the U. S. A.
Fellow Citizens:



Nye Two-Way Solid Stock
Stock complete with any two
genuine Nye Skip Tooth Solid
Dies from $\frac{1}{8}$ " to 1".
Net Price\$5.78



Nye Post Chain Vise
Net Price, complete with 40"
Steel Chain\$6.18



Nye Vise Stand with Pipe
Bender
Equipped With or Without
Nye Vises
Complete without Vise.....\$12.00
Complete with No. 10 Self-
Locking Vise 15.34

Last Sunday I heard a minister preach a sermon that people said was perfectly grand. It was on the evil of money; but I noticed he didn't omit the collection. He hoped that we did not think that money would bring happiness, and at the same time that we would all come to the church entertainment Thursday night, because the ladies were going to furnish a highly enjoyable program for 75 cents.

I don't blame the preacher, because the preacher was right, if a man puts money first. But when a man works twelve hours a day, and worries the other twelve at night, to get money to put the kids through college, he is putting the kids first, the money second, and himself last. You hear a lot about heroes, but, if the average father isn't one, then there aren't any. The more little exemptions a man has running around the house, the less he has need of them at tax time.

And laying up bonds in the bank to keep your widow from want is laying up treasures in heaven, whatever the preacher may think about it. I don't like a tightwad, but a tightwad is better than no wad at all. I never could understand the philosophy that called a spender a saint and a saver a sinner. The trouble with some people when they get hold of a little money is that they are too selfish to keep it, but want to spend it on themselves instead of saving it for others.

The preacher may shake his fist in the face of the money-grubbing American, but few churches are supported by the other kind. After a man has saved up about \$867.11, every time a hand is extended to him it is either knuckles first or palm upward. But saving money is no sin, and even an electrical contractor can do it. All he has to do is to use Nye Tools, they work so much faster and easier, and last so much longer. You don't save a lot of money, but you do save a lot of labor, so you save a lot of money, after all.

Faithfully yours,

Harry G. Nye

Otherwise Known As

The Nye Tool & Machine Works
4120-30 Fullerton Avenue Chicago, Ill.

Copyright, 1928, by Harry G. Nye.

All rights reserved

THE CELEBRATED SKIP TOOTH DIE

(Genuine Nye)

The ANTI-SHORT



Cross section of "BX" shows wrapping of Kraft Armor over conductors and interlocking steel armor.



Removing steel armor from end of cable shows compact Kraft Armor over conductors which provides maximum protection.



"Anti-Short" Bushing between conductors and steel protects against grounds.



General Electric Anti-Short

A split sleeve of red insulating fibre. Bushes cut end of armor and is additional insulation between armor and conductors.



GENERAL

MERCHANDISE DEPARTMENT

FOOL-PROOF BUSHING

General Electric "BX"

Reg. U. S. Pat. Off.

TYPE **A** — **B** — **C**
ARMORED BUSHED CABLE

Marking a distinct advance in installation methods, the General Electric Company now offers this new, flexible bushed cable, so devised as to reduce chances of faulty cutting, trimming or workmanship causing grounds or shorts.

Protected by Kraft Armor between the steel and conductors, this new cable is literally "double-armored." The Kraft Armor protects the conductors under the steel against abrasions.

Unwound and trimmed easily by hand—without the use of sharp tools that may damage insulation of wires—it is readily removed, making room for the "Anti-Short" Bushing.

This fibre bushing provides insulation that prevents shorts, due to abrasions by sharp ends of steel armor. It gives mechanical protection to wires regardless of how sharp or pointed the edge of steel.

The new General Electric "BX" Type A. B. C. Cable closes any argument on the finished job.

ELECTRIC

BRIDGEPORT, CONN.

In the Editor's Mail



Wants Time Slip Samples

Editor,

ELECTRICAL CONTRACTING:

We contemplate making some changes in our time slips and want to get the best slips possible. If you have any samples such as used by other contractors we would like very much to see them.

Ohio Valley Electric Co.
Thomas D. Douglas,
Manager.

Steubenville, Ohio.

[Note: ELECTRICAL CONTRACTING does not have any time slips in its files but it would appreciate having its readers send samples so that Mr. Douglas may have the help he asks for. Editor.]

* * *

Lands \$160.00 Job at Resale Prices

Editor,

ELECTRICAL CONTRACTING:

Permit me to congratulate you on ELECTRICAL CONTRACTING, as I think it the best trade publication ever put in the hands of the electrical contractor. I make use of the short cut methods, estimating service and cannot say enough for the Suggested Resale Price List. Like Mr. W. S. Maddocks of Scranton, Pa., I used this resale service the day I received the January issue and landed a \$160 contract at those prices. Although we only have a small shop with two wiremen, it's a Chinese puzzle to get hold of ELECTRICAL CONTRACTING a few days after publica-

tion, because it is always in use in spare time by someone around the shop.

G. R. Clark,

Manager, The Electric Shop.
Effingham, Ill.

* * *

Use Asbestos in Pull Box Wiring

Editor,

ELECTRICAL CONTRACTING:

The use of pull boxes and junction boxes as ordinarily employed in present day construction work presents a very considerable and unnecessary fire hazard to say nothing of the use and occupancy hazard in the building.

We have endeavored to make this practice reasonably safe by requiring conductors so located to be protected by asbestos taping either for the individual conductors or groups of conductors as they emerge from the separate conduits entering the box.

I do not know of any other form of protection which would be effective without entailing a very considerable expense to the contractor and to the public, and if you could suggest any simple and inexpensive method of protecting these conductors in the pull boxes, I would be very glad to hear from you.

This is an illustration. I have just dictated a letter to a contractor in this city in reference to the installation of a pull box which is "L" shaped and which is 28 ft. 6 in. long and 6 ft. wide in the larger dimensions and the "L" being 18

ft. 6 in. long and 5 ft. wide. This box is 29½ in. in depth and is constructed of No. 10 gauge metal. Perhaps you can visualize what would happen in a box of this size filled with rubber covered conductors in case of a short circuit or a ground.

J. C. Forsyth,
Supervising Engineer,
N. Y. Board Fire Underwriters.
New York, N. Y.

* * *

Leagues Need Money

Editor,

ELECTRICAL CONTRACTING:

Your editorial on "Leagues Need Money," in the February issue was splendid and I want to congratulate you most heartily on it. No doubt, you learned at Cleveland that there are too many good communities that have not yet awakened to the possibilities in league work and the same thing holds for the type of men they hire as league managers. I think this is an important matter and I am glad to see the way you hit at it.

I also want to congratulate you for the broad-mindedness displayed in your editorial in the same issue on "Who Wants All Conduit?"

G. M. Weston,
Secretary-Manager,
Electric and Radio Association
of Kansas City, Mo.

* * *

Want All Conduit

Editor,

ELECTRICAL CONTRACTING:

Referring to an article in the February issue of ELECTRICAL CONTRACTING entitled "Who Wants All Conduit?", published on Page 20.

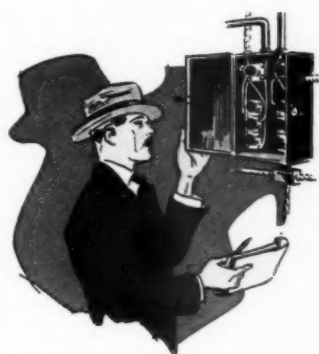
We, the electrical inspectors of Evansville, Ind., want all conduit as it makes the best job and insures a 100 per cent protection so far as life, fire and shock hazards are concerned when grounded and bonded with a safety circuit throughout the system and grounded to a water piping system.

So far as costs are concerned, when conduit installations are installed with the bare neutral system, which we have been using since January 1, 1928, we have found that a conduit system can be installed for about the same price



"Colortop" Fuses

Fast Seller—Nearly 7,000,000 Sold in 7 Months



The inspector's duties are simplified where TRICO "Colortop" fuses are installed. He can tell at a glance if everything is OK.



The perplexity of the consumer guessing the size fuse wanted is eliminated where TRICO "Colortops" are sold. Replacement fuses are bought by their colors.

It's Easy Now to Know the Capacity of a Fuse Instantly by its Color

**Simplifies Inspection, Makes Easy Selection
and is Instructive to Users.**

A help to the storekeepers, stock-clerks and others to select and know the sizes on the shelf and bins quickly. They're packed in 5-unit cartons to facilitate merchandising—have the clear mica window that shows when they blow—and possess the qualities of large center contact, full threaded heavy shell and all porcelain non-shock top. No additional charge for the colored top.

Suggestion to Users: Paint the cut-out the same color as the "Colortop" fuse used. This will assure correct fuse replacements. No guess-work. No possible mistakes.



A colored band around the edge of each 5-unit carton indicates the capacity of the fuse the box contains. (6 Distinct Colors)

Free Samples on Request



No guess-work, no time lost, when storekeepers supply electricians with TRICO "Colortop" fuses. The capacity is known by its color.



TRICO "Colortop" fuses now enable trouble shooters to select instantly the correct fuses from a bag or box of mixed fuses.

Your jobber can obtain TRICO "COLORTOP" fuses for you if he does not have them in stock.

Trico Fuse Mfg. Co., Milwaukee, Wis.

Let this serve as your guide

WARNING! The Colored Top for fuse plugs is fully protected.

Approved by Underwriters' Laboratories, Inc., Hydro-Electric Power Commission of Ontario, and the following: Modern Priscilla, Good Housekeeping Institute, Herald-Tribune Institute, and Associated Factory Mutual Fire Insurance Companies.



Engineering Building

is distinctive for its excellent design and perfect construction.

Located at Wells St. and Wacker Drive, it is one of the first beautiful large buildings erected on this young but already famous drive.

Galvakote (white) rigid conduit pipe was used exclusively for electrical installation in the Engineering Building, and Galvakote (white) as well as Enamelkote (black) is now being used in many other very large and beautiful buildings in Chicago and elsewhere because of extraordinary durability and low cost to install.

Clayton Mark & Company

111 West Washington St.
CHICAGO, U. S. A.

Manufacturers of

Galvakote & Enamelkote

Super-Quality
Rigid Conduit Pipe

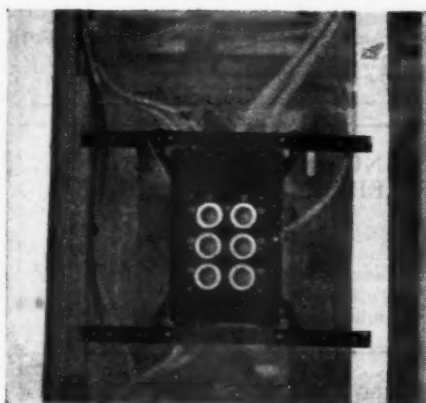
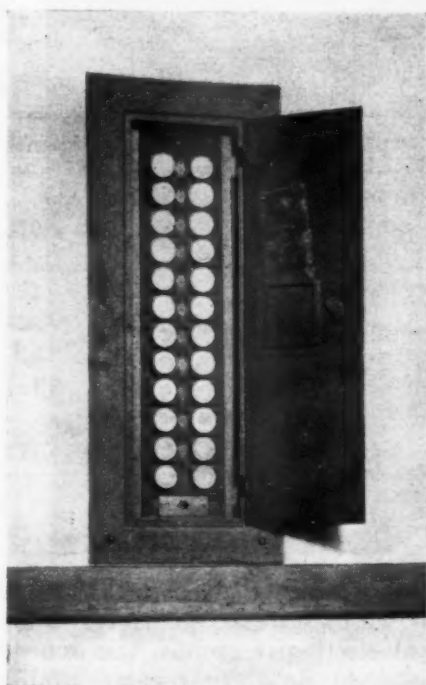
D. H. BURNHAM & CO.
CHICAGO
Architects

PASCHEN BROS.
CHICAGO
Builders

WADEFORD ELECTRIC CO.
CHICAGO
Electrical Contractors

as any other wiring system as you can use three circuits in $\frac{1}{2}$ in. conduit and six circuits in $\frac{3}{4}$ in. conduit by using the neutral common to other circuits and using a bare neutral. Therefore, we consider the conduit system as used by us to be the best job without a doubt, and practically fool-proof so far as changing polarity and being tampered with is concerned.

A. H. Meier,
Edwin F. Koch,
Electrical Inspectors.
Evansville, Ind.

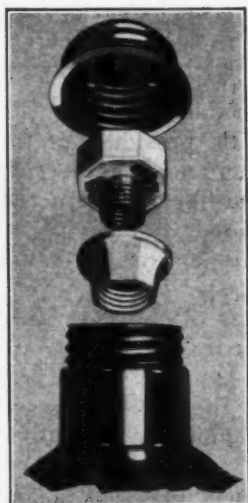


IT LOWERS COST BUT DOES IT IMPROVE JOB:—The upper picture shows a 12-circuit cabinet, flush type, installed in a house that was wired five years ago when only 750 watts of lighting per circuit were permitted. Circuits were double fused. Today, when 1,200 watts per circuit and single fuse cutouts are permitted, the lower cabinet suffices. Is this an improvement in wiring practice in view of the greater loads that the wiring is being called upon each year to carry?



Boost Your Sales with ABolites

(Porcelain-Enameled Reflectors)



Easy to Wire. Everything Accessible. Interchangeable.

A COMPLETE LINE

Type X is made to fit all the usual industrial lighting needs for wide, concentrated or RLM illumination.

And, of course the 5 Big Points ALL ABolites have

Easy to Wire—Easy to Clean—Easy to Change

HERE's one of the latest ABolite trouble-savers from our new Catalog No. 180—and it's one that every one of your men will like, "right off the bat." It's the Type X Long-Necked Reflector Unit.

EASY TO INSTALL

Just unscrew the reflector, and the holder is completely accessible. The 2-part porcelain base makes wiring up still easier.

EASY TO CLEAN

The long-necked reflector is the only part to take down. Nothing to injure—it can be put right into the cleaning bucket if necessary.

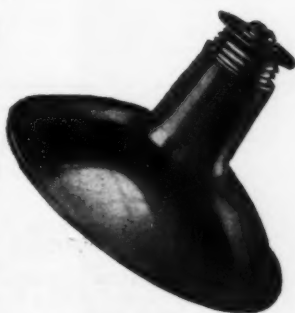
EASY TO CHANGE

Being interchangeable with all the other ABolite Threaded Neck Reflectors, reflectors can be easily changed to suit changed lighting needs.



TYPE BXMK

Type BX Reflector with 4" Outlet Box Cover.



TYPE DXMK
Type DX Reflector With 4" Outlet Box Cover.



TYPE RXQM
Type RX Reflector with Q Type Pendant Holder.



*If You have Catalog 180—See Pages 14 to 16
If You haven't—Write us to Send It*

The ABolite Reflector Co.

2400 East 75th Street

Cleveland, Ohio



Contracting News

Information of Interest to Electrical Contractors consisting of items of news, short articles, practical ideas, etc. Our readers are invited to contribute to this department.

Baker Heads Indianapolis Group

The Electrical Contractors Association of Indianapolis held its annual meeting on February 5, at which time it elected P. P. Baker, president; H. M. Stradling, vice-president; F. P. Foulke, secretary, and J. R. Alexander, treasurer.

The local Electrical League, through its president, Roy Thurman, offered the services of the league engineering department on job layouts without cost to the contractor.

The remainder of the evening was devoted to a general discussion of conditions and plans and a vote on the matter of dues.

* * *

Canton Contractors Studying Code

As an initial activity following the re-organization of the electrical contractors of Canton, Ohio, a class has been formed, meeting every Wednesday evening under the city evening school program, for the study of the National Elec-

trical Code and Canton ordinances. Lawrence Booth, president of the Electric Motor and Engineering Company, is serving as instructor, and has prepared a schedule of study for the ensuing three months' period.

The "Analysis of the New 1928 National Electrical Code," available from the Association of Electricians, is in the hands of each member as a guide in the Code study.

The class meets at 7:15 P. M. in the Foreman's Club Room of the New Vicary Building, and H. L. Moyer, of the Industrial Electric Construction Company, who has been active in forming the class extends a cordial invitation to all electricians or others who may be interested to attend.

* * *

Denver Gets Red Seal Apartment

Denver's first Red Seal, all-electric apartment of 12 suites is nearing completion and will have from 30 to 35 outlets in each apartment. The wiring is being done by the Queen City Electric Co.

Fifty-Six Per Cent Defective

The New York Board of Fire Underwriters reinspected over eighteen thousand equipments in 1928 and found 10,368 or 56 per cent defective as follows:

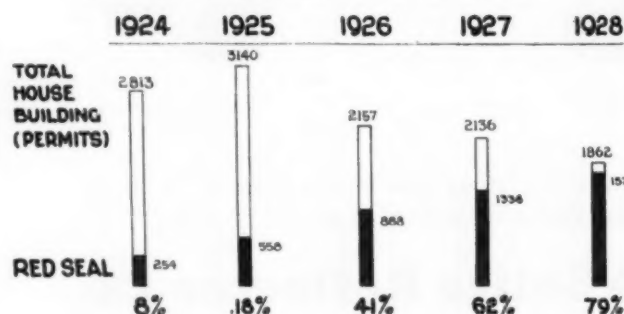
Inspection of Existing Equipments

Buildings completely inspected	4,970
Equipments completely inspected	18,489
Equipments found defective	10,368
Equipments found satisfactory	8,121
Equipments where defects were corrected	5,777

Round Table Meets at Pittsburgh

The Round Table, which is composed of secretary-managers of local electrician groups, was scheduled to hold its regular winter meeting at the Keystone Athletic Club in Pittsburgh, Pa., on February 25 and 26.

PERCENTAGE OF "RED SEAL" HOUSES



AVERAGE NUMBER OUTLETS PER RED SEAL HOUSE

	1924	1925	1926	1927	1928
NO. OF RED SEAL HOUSES	254	558	806	1096	1413
AVERAGE NO. OUTLETS	38	45.5	53.4	59.20	62.80

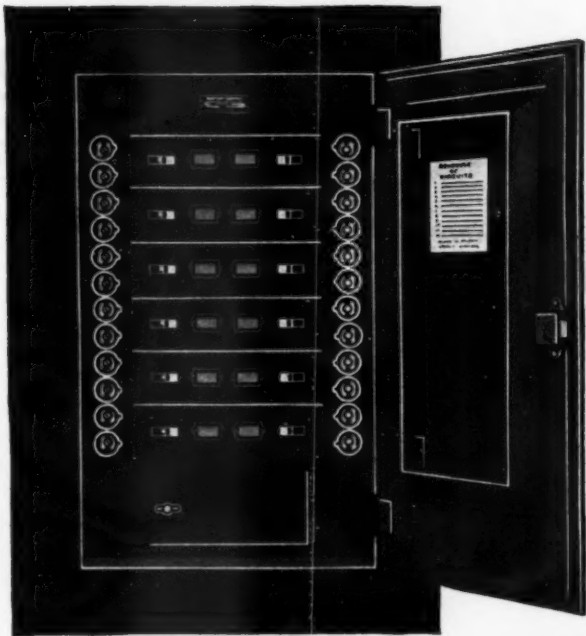
98 RED SEAL HOUSES

Ranges	93—95%	Ironers	10—11%
Water-heaters	77—78%	Portable Heaters	39—40%
Grates	55—56%	Curling Irons	90—92%
Washers	65—66%	Fans	26—27%
Vacs	81—83%	Radios (Electric)	36—37%
Refrigerators	55—56%	Sewing Machines	31—32%
Irons	100—102%	Floor Polishers	8—8%
Toasters	98—100%	Floor Lamps	254—260%
Percolators	27—28%	Table Lamps	185—190%

TORONTO'S RED SEAL RESULTS:—From 8 per cent of the building permits in 1924 to 79 per cent in 1928; from an average of 38 outlets per Red Seal home in 1924 to 62.8 in 1928; with a high percentage of appliances per home based on a survey of 98 Red Seal homes—these are the results of five years of intensive effort on Red Seal in Toronto.

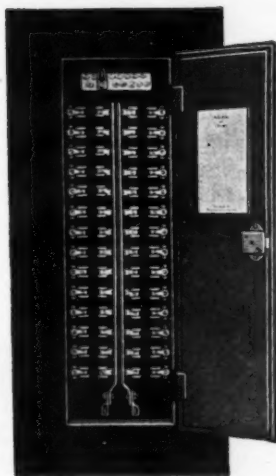
BENJAMIN-STARRETT

Panelboards and Steel Cabinets for Light and Power



Heavy Duty Panelboards offer a choice of three distinct types of cabinets: Safety Front, double door construction, with small door giving access to switches only. Protective Front, single door with protective shield. Open Front, single door without shield. For all classes of installations from residences to large office buildings.

Type G Panelboards are for apartment buildings, factories, churches and similar places having from 4 to 20 branch circuits.

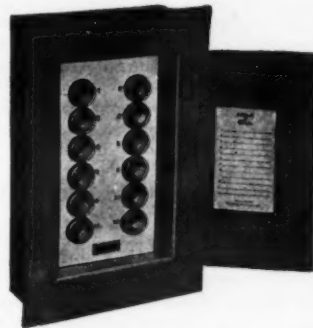


A complete line which provides a suitable panelboard and cabinet for every kind of lighting and power wiring job—for the residence, store, loft building, school, hotel, hospital, factory or modern office building.

Sectional unit construction assures uniform quality of the highest grade, flexibility, adaptability, low installation cost and minimum expense for maintenance over long periods of service.

Harmonious design, combined with careful engineering and skillful manufacturing give Benjamin-Starrett Panelboards and Cabinets an unusually distinctive appearance—the visible evidence on the part of the contractor, of a neat and workmanlike job.

Little Sentry Panelboards are for residences, apartment buildings, stores, schools and similar places having from 4 to 12 branch circuits.



Quick Delivery

Cabinet boxes for the Safety, Protective and Open Front panelboards may be secured from local distributors or district office stocks and installed while panelboard is being shipped from the factory warehouse. Type G and Little Sentry Panels are carried in local stocks completely assembled for immediate shipment.

FREE This 80-Page Catalog The complete listings with their practical arrangement and the clear and detailed illustrations make it easy to select the right panelboard for any job in any type of building. Send for it today.

Benjamin Electric Mfg. Co.

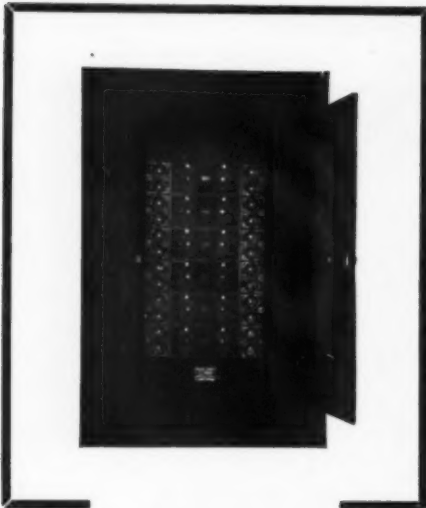
120-123 So. Sangamon Street

New York

Chicago, Ill.

San Francisco





PENN PANELS Pay Profits

ARE you getting all the income you can from the panels you install in your lighting jobs? You ought to be sure before you bid on the next set of specifications. If you have not yet figured Penn Panels in, you have overlooked an opportunity. Besides the first profit you are insured from loss through "make-goods" by Penn Panel's sure-fire operation. No room for details here but,

Send for Catalog

immediately and learn how much money you can make on every Penn Panel you install. Write to the nearest distributor named below, or just fill in and mail the coupon. Act and win.

PENN Electrical Company IRWIN, PA.

Harry W. Wright
Room 212, 90 West
St.
New York City

J. E. Perkins Co.
11 E. Center St.
Baltimore, Md.

R. H. Mathias
2623 Melrose Ave.
Cincinnati, Ohio

F. S. Lewis
618 Real Estate
Trust Bldg.
Philadelphia, Pa.

W. C. Fletcher Co.
502 Illinois Bldg.
Indianapolis, Ind.

James L. Thompson
1528 S. Union Ave.
Alliance, Ohio

Coupon Brings Free Book

Penn Electrical Co., Irwin, Pa.
Please send me free, your catalog of electrical material.

Name

Address

City State 3-29

New York Votes for Credit Plan

The Electrical Contractors Association (No. 1) of New York City according to president John W. Hooley, has decided to put the Detroit Credit Plan into effect in New York early this spring.

"The Detroit Credit Plan is the solution of most of the contractor's problems," Mr. Hooley said. "In a large city like New York, much of the building is done by speculative builders. These men have been financing their projects on other people's money. If the electrical contractors have to pay 30 days, or else go on the cash list, they will not take notes and help the speculator carry the bag."

* * *

To Advertise Adequate Wiring

Aggressive advertising or adequate wiring for new homes and rewiring for old homes was voted at the February 11 meeting of the Westmoreland County (Pa.) League.

The advertisements are to be paid for by contractors and others directly interested. The campaign was expected to start shortly.

* * *

Satchwell Heads Florida Electragists

The outstanding address of the annual joint convention of the Florida Electragists and the Florida Association of Electrical Inspectors, held at Orlando on February 21 and 22, was delivered by C. C. Graham, electrical inspector for the city of Jacksonville, on the subject of "Code Changes."

T. E. Satchwell, of Satchwell & Joseph, Jacksonville, was elected president and R. C. Bigby of Tampa, vice-president of the Electragists, while the new members of the board of directors are S. C. Reddick of Jacksonville and J. J. Newell of Orlando.

The convention, which has come to be of far more importance than state meetings generally are, because of the time and place at which it is held, had an exceptionally fine attendance this year. Much of the enthusiasm was due to the new interest being taken in Electragist local chapter work.

READY



Now! It's New!

It's the new Thomas & Betts Catalog No. 31 and it's full of VALUABLE INFORMATION FOR ELECTRICAL CONTRACTORS. Describes the complete line of T & B CONDUIT FITTINGS with full listings, installation instructions, wiring diagrams, etc. Attractively printed and bound. A book you will KEEP and USE.

We have a Complimentary Copy

We have a COMPLIMENTARY COPY for every reader of ELECTRICAL CONTRACTING.

Write for
Your Copy
NOW

Specify Catalog
No. 31

THE THOMAS & BETTS CO.
15 PARK PLACE
NEW YORK NEW YORK



Sterling Reflectors for
Show Window Lighting.

Sterling Equipment for Interior and
Exterior Flood and Spot Lighting.

Sterling Reflectors for Cove and
General Interior Illumination.

Lighting for Spring

AS each new season is ushered in, scores of new and greater opportunities are immediately created for increased sales on Sterling Reflectors.

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Sterling

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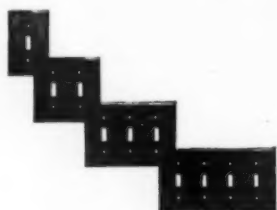
Chicago, U. S. A.

Representatives in All Principal Cities

REYNOLITE
TRADE MARK REG. U.S. PAT. OFF.

ELECTRICAL DEVICES

"The Ultimate in Quality"



Precision in manufacture is the secret of the very high quality of all Reynolite Products.

Attractive in appearance without the sacrifice of efficiency, means more sales to your customer with less effort.



Standardized to such an extent that installations are made more quickly, and better service rendered to your customer.

The Reynolite Sales Policy protects you, and assures a liberal profit on the best designed molded devices possible to manufacture.



REYNOLITE IS THE QUALITY THAT ASSURES YOU OF INCREASED BUSINESS AND GREATER PROFITS.

Write for Dealer's Price Sheet No. 84

REYNOLITE DIVISION
 REYNOLDS SPRING COMPANY
 Jackson, Michigan

Protect your customers and furnish Reynolite better made electrical devices. All Underwriters approved.

Jacksonville Studying Credit Plan

The Detroit Plan is being investigated by the Jacksonville (Fla.) contractors. The committee expects to have their plans prepared soon for presentation to the Jacksonville Electrical Contractors Association.

Check Your Wire

Remember that copper is higher than it has been for years. Wire prices are reflecting that condition. Check all of your wire prices against those in the Resale Price Section (PL-26, 27, 28) before submitting an estimate.

Rochester Exceeding Red Seal Bogey

A bogey of 500 Red Seal homes in 1929 was set by the electrical league of Rochester, N. Y., and in the first seven weeks of the year 71 applications had been reported.

* * *

Five-Day Week Again in Courts

The labor situation in New York City is going through the courts. First the Building Trades Employers Association sought to enjoin the Electrical Contractors' Association (No. 1) for making a separate agreement with labor granting the 5-day week at a higher wage per day.

The contractors contended successfully that they had such a right because they had previously reserved the right to arbitrate all labor troubles with the union through the Council on Industrial Relations. The court held that this was undoubtedly a labor trouble and that the contractors had a right under their reservation to make such separate agreements.

Later the Building Trades Employers Association started suit against the union to enjoin it from carrying out the 5-day week. The employers charged the union with attempting to compel fixture manufacturers and others to unionize.

This latter suit was in the courts at the time of going to press.

The Electrical Contractors Association has resigned as a body from the B. T. E. A.

TIME 2	TIME 1
MATERIAL 2	MATERIAL 3
TOTAL 4	TOTAL 4

Portrait of a Contractor

who learned that
something else besides
2 plus 2 equals 4



“Dear Sirs:

I can bid as low on Bronze Embossed 'Red Spot' Hangers as the other fellow asks for cheap brass hangers because I save as much on time as he saves on material. Of course I get more than my share of the jobs because the customer almost always chooses genuine bronze in preference to brass at the same price.”

RED SPOT

Until you have examined the time-saving construction of Wakefield Bronze Embossed “Red Spot” Hangers

it's hard to realize that these fine fixtures cost no more on the ceiling than skimmed units offered “at a price.” Let us show you a sample.

Use The Coupon

The F. W. WAKEFIELD BRASS CO.
Vermilion, Ohio, U.S.A.

The F. W. Wakefield Brass Co., Vermilion, Ohio.

Please supply sample Bronze Embossed “Red Spot” Hanger and explain the time-saving construction that enables me to sell bronze at the price of brass.

Name.....

Street.....

City..... State.....

77

*For Refrigerators, Oil Burners,
Small Horsepower
Motors!*



Now is the time to be considering the business you have before you.

Soon you will be selling and installing refrigerators, and with everyone installed, this little switch, the ▽ "77" is a fitting companion.

It is small, compact, and built for direct application to small motor driven machinery, such as oil burners, electric refrigerators and pumps, commercial sewing machines and for individual control of small motors in industrial plants, in fact for any motor application up to $\frac{1}{4}$ horsepower.

Even though small in size, it has ample wiring space and features that allow it to be installed quickly.

Send for complete information about "77" with prices.

Trumbull-Vanderpoel Elec. Mfg. Co.

BANTAM, CONN.

Subsidiary of Cutler-Hammer, Inc., Milwaukee, Wis.



SAFETY SWITCHES



Suggested RESALE PRICES *for* Wiring Supplies

The prices listed on the following pages are merely suggested resale prices for the commonly used standard supplies and equipment employed in electrical construction work. They are based on average current trade costs throughout the country, very largely obtained from jobbers' price sheets, and are also based on average overhead charges.

* * *

Obviously, prices can be suggested only for the widely used products that are nationally distributed, and under no circumstances is this section intended to function as a directory of products or manufacturers.

* * *

The publishers wish to again emphasize that these are merely *suggested* resale prices and while every effort is made to make them universally applicable and accurate we cannot guarantee them or assume any responsibility for errors.

* * *

The prices appearing in this section will be completely revised each month as trade prices may change.

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Electrical Trade Publishing Co.

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A-SUNDRIES

Asbestos Millboard—Per Pound—29c.

No. Drops	Edwards 81 Dixie	Edwards No. 91 White Enam.	Ansonia 301 to 309	P & W "Competition"	P & W "Automatic"
2 Drop	\$10.00	\$13.25		Guarantee
3 "	11.75	15.00	\$10.00		
4 "	13.25	16.75	11.00	\$12.40	\$16.00
6 "	15.75	19.75	15.00	16.75	20.00
8 "	19.75	23.10	17.00	20.00	25.20
10 "	23.00	26.50	19.50	23.40	30.00
12 "	26.50	29.75	22.70	28.25	
14 "	25.25		
16 "	28.00	34.75	
Ex. Drops ea.	2.25	3.00			

(All other Announcers—Sell at List less 10%).

	Bryant No.	Benjamin No.	Hubbell No.	Ea
Medium to Candelabra.....	392	\$.25
Candelabra to Miniature.....	39120
Mogul to Medium.....	421	9850
T. H. to Edison.....	935713
Parallel Blades to Medium.....	100634
Porcelain Blades to Medium.....	KF	5424	.36
Composition Blades to Medium.....	KL	5897	.50

Benjamin No. 91 Socket Extension—Ea.....	\$.4
No. 119 Socket Extension for New Type A Mazda Lamps—Ea.....	.1

Hubbell No. 5828-5829—Ea.....	\$.4
-------------------------------	-------

	Price
Universal Cord Adjuster Standard No. 1417 3/4" Long.....	\$.11
Factory No. 1418 5/4" Long.....	.20
" Reinforced No. 1419 5 5/8" Long.....	.20
Ball Type No. 1403 & 5 for Type C Cord.....	.00
No. 4634 & 5 for Reinforced Cord.....	.01

Hubbell No. 5919 Acorn Adjustable for Linen Cord.....	\$.1
" No. 6982 " Standard for Pull Sockets.....	.1
" No. 7004 " Candelabra Detachable.....	.1
" No. 7015 or Bryant 750 Luminous Acorn.....	.3

Description	Depth	Gem Nos. or Similar	Price Each Black Galv.
For Loom Without Clamps	2 & 2½"	A-C-D-E & S	\$.20 \$.22
" " With 2 Loom Clamps	2½"	F	.17 .18
For Metallic Cable with Clamps	2½"	FC	.16 .18
" " " " " "	2 & 2½"	X & XS	.22 .25
" " " " " "	3"	Y	.35 .40
For Rigid Conduit with't Clamps	2-2½-2¾"	B-BM & BS	.20 .22
" " " " " "	1½"	R	.22 .25
" " " " " "	3½"	BD	.35 .40
Spacers—For Spacer for any box deduct from box price			.04 .05

For Loom, Lath Supports-No Clips.	2 1/4"	FCB	Black \$.30	Galvd. \$.35
For Metallic Cable, Lath Supports with Clamps	2 & 2 1/2	XB & XSB	.35	.40
For Rigid Conduit, Lath Supports No Clamps	2 & 2 1/4	BB & BSB	.30	.35

For Loom with Mtg. Ears & Clps.	2 1/4"	FCT	\$.25	\$.30
For Metallic Cable, Mtg. Ears & Clamps.....	2 & 2 1/4	XT-XCT-XST	.30	.35
For Rigid Conduit, Mtg. Ears without Clamps.....	2 & 2 1/4	BT-BST	.30	.35

	Boxes	Spacers
	Black Galvd.	Black Galvd.
For Loom or Rigid Conduit 1½" Deep No. 170.....	\$.20	\$.15
For Rigid Conduit 2½" Deep—2 Gang No. 160.....	.75	.35
	.25	.18
	.85	.38

	Single	2 Gang	3 Gang
Solid Drawn for Loom 2½" Deep Type SS Black....	\$.15	\$.30	\$.45
" " " " Rigid Conduit No. 180-181-187-Galv.25
" " " " with Lath Support, Black.....	.25	.40	.55

		Black			Galvanized		
Loom, Cable, Conduit		2 Gang	3 Gang	4 Gang	2 Gang	3 Gang	4 Gang
Tandem Boxes 1½ & 2" Deep	\$.60	\$1.00	\$1.40	\$.75	\$1.10	\$1.70	
" 2½ & 3" Deep	.75	1.10	1.70	.85	1.20	1.95	

Union No. DS-1-3 & 5	Appleton 7010-12-14 without Clamps	Black	Galvd.
" No. DS-2-4 & 6	" 7011-13-15 with Clamps...	\$.50	\$.60
		.60	.70

Any Make.....	Each
For Concrete Boxes See Page PL-5.	\$.20
For Solid Gang Boxes See Page PL-5.	

Univ. No.	Size	Depth	Knockouts		Price Each	
			Bottom	Side	Black	Galvd
24151	3 1/2" Oct.	1 1/2" KO	1 1/2"	4 1/2"	\$.13	\$.16
24151	3 1/2" "	1 1/2" KO	1 1/2"	4 1/2"	.16	.18
24155	3 1/2" "	1 1/2" KO	1 1/2"	4 1/2"	.16	.18
51151	4" Sq.	1 1/2" KO	1 1/2"	8 1/2"	.22	.24
52151	" "	1 1/2" KO	1 1/2"	10 1/2"	.20	.24
52151	" "	1 1/2" KO	1 1/2"	10 1/2"	.22	.25
54151	" Oct.	1 1/2" KO	1 1/2"	4 1/2"	.17	.20
54151	" "	1 1/2" KO	1 1/2"	5 1/2"	.20	.23
54155	" "	1 1/2" KO	1 1/2"	5 1/2"	.26	.30
54171	" "	2 1/2" KO	2 1/2"	4 1/2"	.30	.35
72151	4-11/16" Sq.	2 1/2" KO	2 1/2"	8 1/2"64
72171	4-11/16" "	2 1/2" KO	2 1/2"	8 1/2"58

COVERS, ROUND
For 3 1/4" & 4" Octagon & Round Boxes

Universal No.	Size	Description	Price Each
			Black Galvd.
24C-1	3 1/4"	Flat Closed Cover Blank 3 1/4"	\$.06 \$.08
24C-2	"	Raised 3/8" Closed Cover Blank	.06 .08
24C-6	"	Flat with 1/2" KO	.07 .09
24C-7	"	Raised with 1/2" KO	.08 .10
24C-12	"	Raised 3/8" Hole, for Cord or Bush	.08 .10
24C-28	"	Spider Flat for Surf. Mntd. Devices	.09 .11
24C-31	"	Raised 3/8" Opng. for Fed. Sign Recep.	.08 .10
24C-33	"	Flat Opng. 3/8" for Spec. Sign Recep.	.23 .25
24C-35 & 36	"	Raised Opng. 3/8" for Scrw Sign Recep.	.08 .10
54C-1	4"	Flat Closed Cover	.07 .09
54C-2	"	Raised 3/8" Closed Center	.08 .10
54C-3	"	Raised 3/8" Opening 2 3/4"	.11 .13
54C-6	"	Flat with 1/2" KO	.08 .10
54C-7	"	Raised 3/8" with 1/2" KO	.10 .12
54C-12	"	Raised with Opening for Cord	.08 .10
54C-28	"	Flat for Surface Mounted Devices	.10 .12
54C-31	"	Raised for Federal Sign Receptacles	.09 .11
54C-35 & 36	"	"	.09 .11
1172	3 1/4"	Porc. Round Cov. for 3 1/4" Box with hole	.20
1173	4"	Porc. Round Cov. for 4" Box with hole	.30

COVERS, SQUARE
For 4" & 4-11/16" Square Boxes

Universal No.	Size	Description	Price Each
			Black Galvd.
52C-1	4"	Flat Closed	\$.09 \$.11
52C-2	"	Raised Closed Center	.13 .15
52C-3	"	" with 2 3/4" Opening	.15 .17
52C-6	"	Flat with 1/2" KO	.12 .14
52C-7	"	Raised with 1/2" KO	.17 .19
52C-12	"	" Hole for Cord	.14 .16
52C-13	"	Raised 3/8" For Single Flush Devices	.12 .14
52C-14	"	" " " " " "	.13 .15
52C-15	"	" " " " " "	.18 .20
52C-16	"	" " " " " "	.22 .24

For Flush Devices

Universal No.	Size	Description	Price Each
			Black Galvd.
52C-17 & 18	4"	Raised 3/8" For Two Flush	\$.18 \$.20
52C-2	"	Raised 1 1/2" For Two Flush	.26 .28
52C-21	"	Raised 1 1/2" For Two Flush	.28 .30
52C-28	"	Flat For Surface Mounted	.18 .20
52C-35 & 36	4" Sq.	Raised for Sign Receptacles	.17 .19
52C-48	"	Raised with 2 3/4" Opening	.12 .14
52C-62	"	Raised 3/8" For Single Flush	.12 .14
72C-1	4-11/16" Sq.	Flat Closed	.30
72C-2	"	Raised Closed Center	.38
72C-3	"	Raised 2 3/4" Opening	.40
72C-12	"	Raised with Hole for Cord	.40
72C-14	"	Raised 3/8" For Single Flush	.44
72C-18	"	Raised 3/8" For Two Flush	.55
72C-48	"	Raised 2 3/4" Opening	.40

EXTENSION RINGS

For Flush Devices

Universal No.	Description	Price Each
		Black Galvd.
25151-57151	3 1/4" Octagon Ring—1 1/2" Deep	\$.26 \$.28
53151-55151	4" Square or Octagon Ring—1 1/2" Deep	.28 .30
55171	4" Octagon Ring—2 3/4" Deep	.48 .54

SHALLOW CEILING BOXES & PLATES

Universal No.	Box or Plate	Size & Description	Price Each
			Black Galvd.
26121-26125	Box	3 1/4 x 3 1/4" Box with KO	\$.14 \$.16
26126	"	4 x 3 1/4" Round 1/2" KO	.13 .15
26126	Plate	3 1/4 Flat Plate	.08 .10
36115	Box	3 1/4 x 3 1/4" Round with KO	.14 .16
36116	"	3 1/4 x 3 1/4" Round with KO	.11 .13
56111 1/2" KO	"	4 x 3 1/4" Round 1/2" KO or 3/4" KO	.13 .15
56112	"	4 x 3 1/4" Round 3/8" KO or 1/2" KO	.09 .12
56115	"	4 x 3 1/4" Round 3/8" KO	.14 .16
56116	"	4 x 3 1/4" Round 3/8" KO	.11 .13
56121	"	4 x 3 1/4" Round 3/8" KO	.17 .19
56122	"	4 x 3 1/4" Round 3/8" KO	.13 .15
56125	"	4 x 3 1/4" Round 3/8" KO	.32 .37

CONCRETE BOXES WITH COVERS

Galvd. Only

Depth	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	6"
Complete with Plate & Stud	\$.30	\$.35	\$.40	\$.45	\$.50	\$.55	\$.60	\$.65
less	.25	.30	.35	.40	.45	.50	.55	.60

SOLID GANG BOXES & COVERS

Galvd. Only	2	3	4	5	6	7	8
Gang	\$.80	\$ 1.20	\$ 1.65	\$ 2.10	\$ 4.00	\$ 6.35	\$ 6.50
Box Price...	.40	.60	.80	1.00	2.00	3.35	3.70
Cover							

BOXES, OUTLET

ARMORED CABLE BOXES

Austin Series 730-731-733	1/2" Deep	3/4" Deep	1 1/2" Deep
With Clamps & Fixture Studs	\$.20	\$.25	\$.35
Appleton Series No. 528 to 534	1/2" Deep	3/4" Deep	1 1/2" Deep
With Ears, with Fixt. Stud and Clamps		\$.25	\$.35
No Ears, With Fixt. Stud and Clamps	.30		
With Ears, No Fixt. Stud, With Clamps		.20	.25

March, 1929

ARMORED CABLE BOXES—Continued

Chicago Fuse "Union" with clamps	Galvd.
No. 1286 Shallow 1/2" Deep without Fixt. Stud or Bush Plates	\$.15
No. 1287 X Shallow 3/4" Deep without Fixt. Stud, with Bush Plates	.20
No. 1287 XS Shallow 3/4" Deep with Fixt. Stud, with Bush Plates	.25
No. 1289 Shallow 1 1/4" Deep without Fixt. Stud, without Bush Plates	.25
No. 1289 X Shallow 1 1/4" Deep without Fixt. Stud, with Bush Plates	.30
No. 1289 XS Shallow 1 1/4" Deep with Fixt. Stud, with Bush Plates	.35

G. E. Cable Boxes any style No. 5200-5201—Each \$.20

Hope Cable Boxes any style No. 2-4-12-14—Each \$.20

National Electric Products, with Clamps	
No. 2365-6-7 Shallow 3/4" Deep with Fixt. Stud or for 1/2" Gas Pipe	\$.20
No. 2345 Octagon Deep 1 1/4" Deep with Fixt. Stud and Clamps	.35
No. 2355 Round Deep 1 1/4" Deep with Fixt. Stud and Clamps	.30

Thomas & Betts	
No. 553-54-55-56-57 Dead Ground, Electric or Combination	\$.30
No. 565-66-67-68 Cable Box, Electric or Combination	.20

BAR HANGERS FOR OUTLET BOXES

Without Boxes

Price with 3/4" Stud	Straight 18" Bar	Straight 24" Bar	Shallow Offset	Deep Offset	Old Work Bar	Box Cleat
" " 1/2"	\$.25	\$.35	\$.32	\$.32	\$.20	
" No Stud		.35	.35	.35	.25	\$.16

BAR SETS

Complete with Boxes

	Black Each
3 1/4" Round without Ears	\$.35
3 1/4" Round with Ears	.40
4" Round without Ears	.30
4" Round with Ears	.35

BUSHINGS & LOCKNUTS

BUSHINGS & LOCKNUTS

For Rigid Conduit

	1/2"	3/4"	1"	1 1/4"
Locknuts—Each	\$.01	\$.01 1/2	\$.02 1/2	\$.06
Bushings—Each	.02	.03	.05	.10
Locknuts—Each	1 1/2" \$.10	2" \$.14	2 1/2" \$.24	3" \$.38
Bushings—Each	.13	.24	.35	.55
				1.00 1.65

PORCELAIN CLAMP BUSHINGS

"Federal" or Equivalent

No.	K. O.	Inside Size	Outside Size	Wire Size	Bushing Each	Extra Ring Each
A-1	1/2"	5/8"	1 1/4"	No. 10	\$.10	\$.04
A-1 1/2	1 1/2"	1 5/8"	2 1/4"	No. 10	.11	.04
A-2	1 1/2"	1 5/8"	2 1/4"	No. 8	.11	.04
A-3	1 1/2"	1 5/8"	2 1/4"	No. 3	.12	.05
A-4	1 1/2"	1 5/8"	2 1/4"	No. 00	.16	.07
A-5	1 1/2"	1 5/8"	2 1/4"	450 CM	.23	.10
A-6	2"	2 1/8"	2 3/4"	1 Mill. CM	.46	.12
B-1	1 1/2"	1 5/8"	2 1/4"	No. 10	.21	.04
K-1	1 1/2"	1 5/8"	2 1/4"	No. 10	.32	.04
K-2	1 1/2"	1 5/8"	2 1/4"	No. 8	.37	.05

PORCELAIN NO CLAMP BUSHINGS

Multi- With Spring Clip, Not Threaded

Catalog No., Multi	90A	90B	91	92A	92B
Size of Hole	5/8"	1 1/8"	1 1/2"	1 3/4"	1 3/4"
To Fit Hole	5/8"	1 1/8"	1 1/2"	1 3/4"	1 3/4"
Price	\$.05	\$.05	\$.05	\$.06	\$.06

THREADED BUSHINGS

Porcelain without Locknut	1/2" \$.05 Each	3/4" \$.06 Each	1" \$.07 Each
" with	.06 Each		
Black Composition	1/2" \$.01	3/4" \$.06	1" \$.02
For Sockets			

BOXES, FLOOR

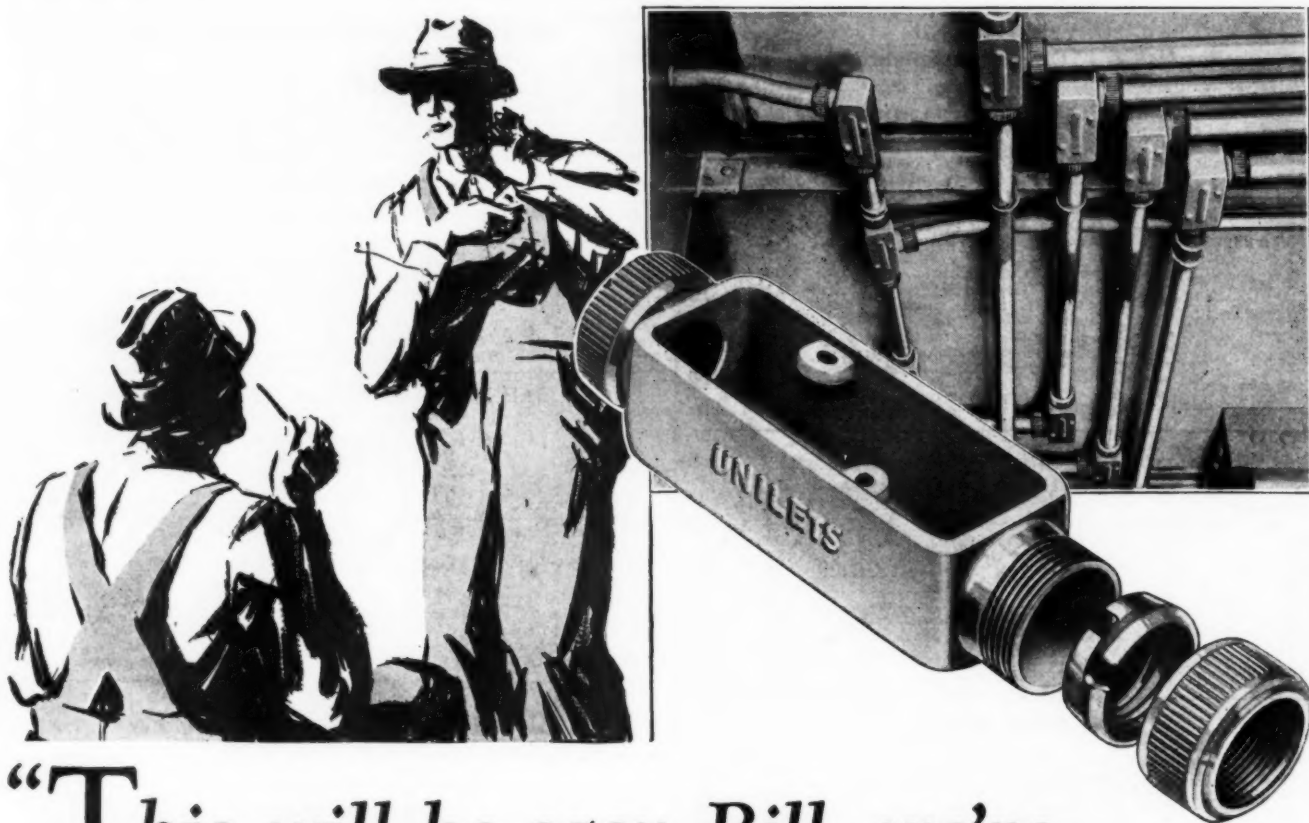
NON-ADJUSTABLE TYPE

Latrobe & Steel City or Similar

Latrobe No.	Steel City No.	Price
No. 100	No. 490	Round Non-Adjust. Outfit Less Recept. \$3.45
No. 110	No. 490	" " " " " " Less Stem No. & Recept. 2.40
No. 110	No. 477	" " " " " " with Standard Recept. 3.90
No. 300	No. 491	" " " " " " "20 Amp. Polar. Recept. 4.95
No. 300	No. 499	" " " " " " Midget Res. Outfit with Recept. 2.40
No. 495	No. 495	Square Type without Receptacle 4.30
No. 496	No. 496	" " " " " " with 15 Amp. Receptacle 5.35
No. 497	No. 497	" " " " " " "25 " " " 8.60

ADJUSTABLE TYPE

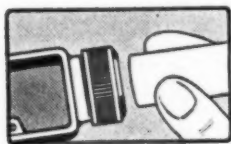
No. 120	No. 400	Round Cover Outfit without Receptacle \$4.30
No. 130	No. 401	" " " " " " with Receptacle 5.35
	No. 420	" " " " " " Large Type without Receptacle 4.90
	No. 421	" " " " " " " " with Receptacle 5.95



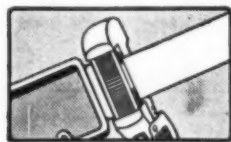
"This will be easy, Bill, we're using Appleton No-Thread Unilets"



1. Loosen nut



2. Insert conduit



3. Tighten nut

ANY job is easy with Appleton No-Thread Unilets, as every man who has used them knows: Easy—because there are no threads to cut on conduits. Easy—because Appleton No-Thread Unilets are so simple to install.

Just loosen the nut—insert the conduit—tighten the nut. That's all there is to it. A vise-like grip cuts through the conduit enamel and gives a perfect contact.

Naturally, workmen like to use them. And the boss saves a lot of expensive time. Appleton No-Thread Unilets make alterations a simple matter.

Made of Malleable Iron

Light and yet extra strong, because made of Malleable Iron, Appleton No-Thread Unilets are not affected by constant vibration or other forms of abuse. They will last practically indefinitely. Rust is almost impossible since they are made of Malleable Iron with a Cadmium finish.

All the types and sizes of Unilets are shown in our latest catalog. Send for yours today.

Appleton No-Thread Unilets are listed as Standard by Underwriter's Laboratories in 3/4-inch to 4-inch sizes, inclusive

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APPLETON ELECTRIC COMPANY

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APPLETON

No-Thread Malleable

UNILETS

REG. U. S. PAT. OFF.

The Original Threadless Conduit Fittings



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Gentlemen:

Please send us a copy of your new Bulletin 9DA on Malleable No-Thread Unilets, together with prices.

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You Sell Electrical Installations Not Only WIRE!

The thing you sell your customer is a complete electrical installation. Your object in assembling this installation is to sell it at a profit. You are interested therefore, in all material that goes into the job.

Don't consider wire only, install a complete installation that you can sell at a profit. Choose the parts and materials that, when every feature is considered, will make a reputation and show a profit for you.

Quality wire, made by a reputable manufacturer, wire time-tried and tested to give profitable service after the job is completed, that's the wire to choose.

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in the nation's largest and most prominent buildings, that is the basis of profit in their choice.

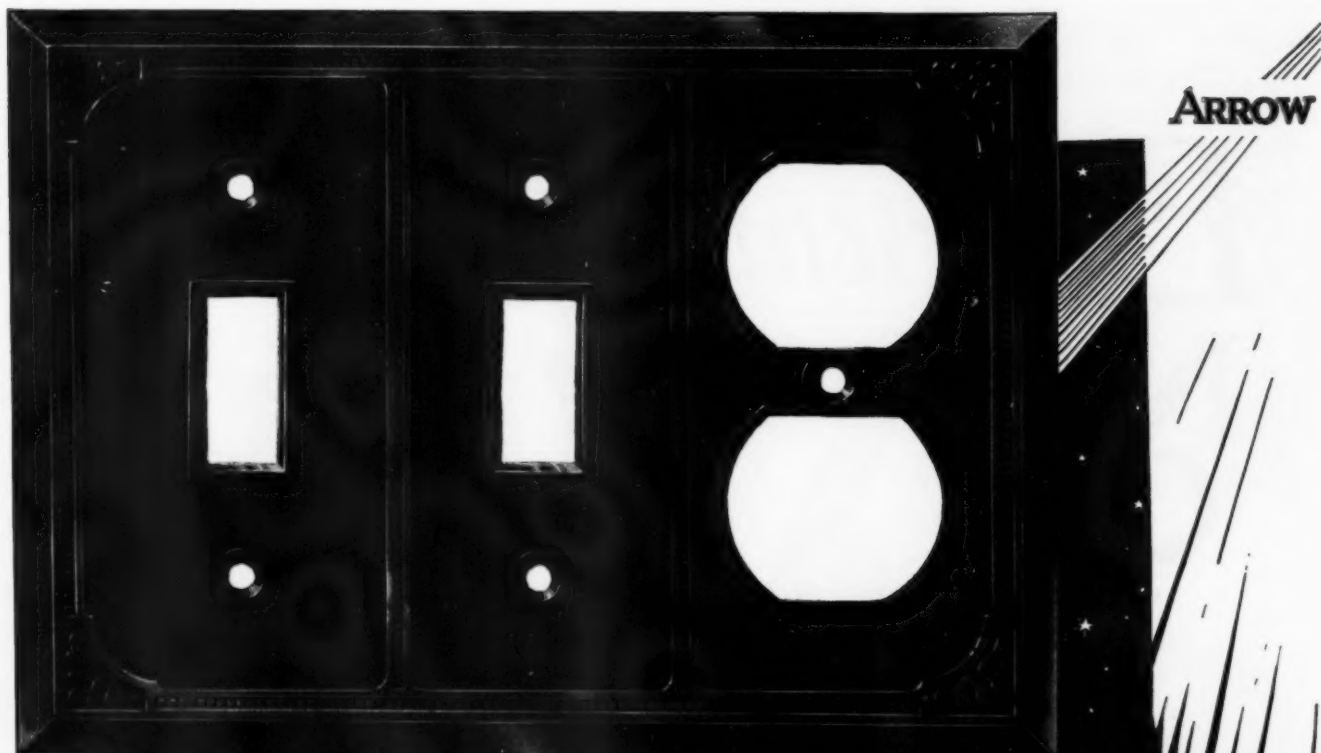
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New Arrotex **PLATES**

for TUMBLER SWITCHES and RECEPTACLES

ARROW

Cat. No.	List Price	Description
★9057	\$0.45	For 2 Switches and Single Receptacle.
★9056	.45	For 2 Switches and Duplex Receptacle
9018	.30	For 1 Switch and Single Receptacle
9019	.30	For 1 Switch and Duplex Receptacle
88	.25	Ruby Jewel or Bull's Eye for Tumbler Plates

A few of the popular numbers.
Send for complete catalog data.

★ New numbers.

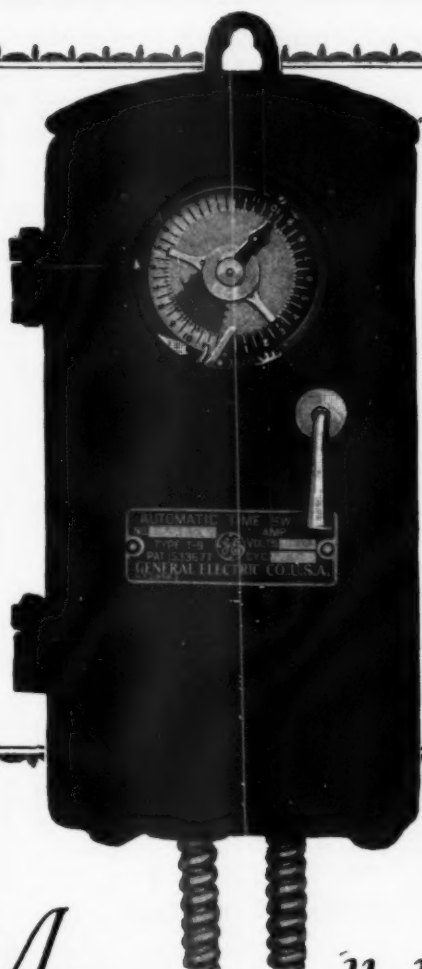
3 Gang Combinations

TWO new "ARROTEX" Plates in 3-Gang Combinations make the line more popular than ever. Use the new numbers for Two Tumblers and Single or Duplex Convenience Outlets; or for the handy Warning Light Unit of Switch, Bull's Eye and Receptacle.

The attractive border and ribbed satin surface of "ARROTEX" Plates are beautiful and distinctive — Made in all popular styles, economically priced.

ARROW ELECTRIC DIVISION

ARROW-HART & HEGEMAN ELECTRIC Co., Hartford, Conn., U. S. A.



* *A time-controlled switch for turning circuits "on" and "off" automatically.*



The success of the motor-operated timing element, as embodied in these superior switches, has also been demonstrated by the Telechron. This popular springless electric clock is likewise accurately regulated from the power station.

Those who know the satisfaction of time-keeping electrically will insist upon these modern time switches*

YOU just set the *modern* clock in place and plug into a handy wall outlet—you don't need to wind it once a week.

The same refinement of operation is available in G-E time switches, which are unique in their field by reason of the same operating principle—a little electric motor running in step with the power supply.

What are the practical advantages? Accuracy beyond question. Reliability such as has established the general confidence in present-day electric service. Flexibility in locating the time-control device, because there is no winding to be considered. Freedom from the necessity of frequent periodic attention. And all because the G-E time switch is a *better switch, motor-operated*.

Available through G-E distributors. A postal card or letter to your G-E distributor or the nearest G-E office will bring full information.

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN PRINCIPAL CITIES

621-8

ADJUSTABLE GANG TYPE

		ADJUSTABLE GANG TYPE	Price
No. 251	No. 441	Single Adj. Box without Receptacle.....	\$ 5.35
		" " "with one Receptacle.....	6.45
No. 252	No. 442	Two Gang Box without Receptacle.....	10.70
		" " "with two Receptacles.....	12.85
No. 253	No. 443	Three Gang Box without Receptacle.....	16.00
		" " "with three Receptacles.....	19.50
No. 254	No. 444	Four Gang Box without Receptacle.....	21.45
		" " "with four Receptacles.....	25.70
Add or Deduct for more or less receptacles—each.			\$1.00

FLOOR BOXES
Thomas & Betts

No. 100	Floor Box Complete	— as described in catalog	\$4.30
No. 200	" "	" " " "	4.30
No. 1100	" "	Watertight type as described in catalog	8.25
No. 1200	" "	Telephone " " " "	3.75

BOXES, CUTOUT

TYPE "A" SURFACE CUTOUT BOXES

Black

Width Inches	Length Inches	3" Deep \$	4" Deep \$	5" Deep	6" Deep
4½	5	.50	.55	.....	.....
4½	9	.60	.85	\$1.12	.....
4½	9	3½"	.....	.....	.....
6	6	.55	.65	.....	\$1.58
6	8	.65	.75	1.35	1.30
6	9	.70	.75	1.50	1.20
6	10	.75	.90	1.50	1.97
6	12	.80	.90	1.72	2.18
6	16	1.47	1.25	1.92	2.45
8	8	.75	.90	1.25	1.50
8	10	.95	1.00	1.45	2.10
8	12	1.00	1.10	1.65	1.85
8	15	1.15	1.25	2.18	2.70
8	18	1.35	1.65	2.48	2.95
9	9	.85	.95	1.70	2.09
9	12	.95	1.25	2.00	2.45
9	15	1.15	1.35	2.38	2.86
9	16	1.85	1.50	2.45	3.00
9	18	2.00	2.40	2.67	3.25
9	20	2.10	2.50	2.75	3.48
10	10	1.00	1.15	1.65	2.00
10	12	1.15	1.40	1.90	2.10
10	15	1.35	1.55	2.15	2.50
10	18	2.19	2.30	2.45	3.50
10	20	2.59	2.75	3.00	3.82
10	24	3.05	3.40	3.89	4.34
10	28	4.90	5.38	5.61	6.62
10	32	5.41	6.02	6.61	7.35
10	36	6.02	6.65	7.22	8.17
12	12	1.10	1.40	2.15	2.40
12	16	2.50	1.60	3.24	3.65
12	18	2.72	2.75	2.80	3.10
12	20	2.92	3.25	3.50	3.90
12	24	3.48	3.50	3.70	4.25
15	24	4.10	4.25	4.50	4.95
15	15	2.90	3.00	3.75	2.85
16	18	3.40	3.50	3.60	3.40
16	20	3.70	3.85	4.40	4.75
16	28	6.88	7.54	8.15	8.85
18	18	3.80	2.80	3.00	3.30
18	20	4.10	4.75	5.00	5.50
18	24	6.62	7.30	7.80	8.50
18	28	7.58	8.27	8.85	9.60
18	36	9.50	10.15	10.90	11.70
24	24	8.45	7.50	9.90	9.65
24	28	9.65	10.40	11.00	11.85
24	32	10.85	11.65	12.40	13.20
24	36	12.10	12.90	13.70	14.50
24	40	13.25	14.10	15.00	15.60

For Galvanized Boxes Add 20% to above prices.

BELLS & BUZZERS

Ansonia

Name	No.	Description	2½" Bell or Buzz.	3" Bell	4" Bell	Cow or Sleigh
No. 656	656	Sgle. Coil Non-Adjust.	\$.60	.....	.....	.....
Ansonia	652	Dbble. Coil Round Base	.70	.....	.....	.....
Wizard	659	Dbble. Coil Non-Adjust.	.75	.....	.....	.....
Eureka	641	Dbble. Coil Adjust. B.	1.00	\$1.20	\$1.60	\$1.70
Acme	631	Dbble. Coil Adjust. A.	1.35	1.50	1.85	2.25
Eureka	621	Dbble. Coil Wood B. B	1.60	1.75	2.00	2.25
Wizard	660	Comb. Bell & Buzzer.	1.20	1.30	.....	.....
"	666	Watch Case Buzzer..	1.25	.....	.....	.....
"	655	N. P. Square Buzzer..	2.00	.....	.....	.....
Monitor	658	Monitor Round Bell..	.....	1.80	.....	.....
"	661	" " " " " "	.....	1.80	.....	.....

Edwards

Name	No.	Size	Description	Price Each
Dixie	720	2 1/2" Two	Coil Non-Adjustable Bell	\$.75
	725	" "	Buzzer	.75
Nubel	735	2 1/4" "	Gray Enameled Bell	.60
	736	" "	Buzzer	.60
Combel	737	2 1/4" "	" Bell & Buzzer	1.15
Tubell	738	Dble.	" " Two Bells	1.25
Cadet	710	2 3/4" Two	Adjustable Bell	1.00
	715	" "	Buzzer	1.00
	712	3" "	Bell	1.20
	714	4" "	"	1.60
	X	" "	Cow or Sleigh	1.70
Buz-A-Bell	730	2 1/2" "	Combination Bell & Buzzer	1.20
Monitor	156	3" "	Monitor Bell Nickled Gong	1.80
Bronx	750	1 3/4" "	Nickled Watch Case Buzzer	1.25

No. 13 Bells

Size	Price
12"	\$2.00
14"	1.50
16"	1.00
22"	.90
3"	2.00
4"	2.20
6"	0.60
Cow or Sleigh	2.25

No. 15 Buzzers

Size	No.	Price
1 1/4" x 1 1/4"	No. 0.....	\$1.85
2 1/4" x 1 1/4"	No. 1.....	1.60
2 3/4" x 1 3/4"	No. 2.....	1.70
3" x 2"	No. 3.....	2.00
3 1/4" x 2 1/4"	No. 4.....	2.20

Partrick & Wilkins Iron Box Bells

Small 24" Iron Box Bell Adjustable Dble. Coil.....	Price \$.75
Fancy Gong Cow or Sleigh Bell Adjustable Dble. Coil.....	1.75
Small 11 1/2" Nickled Midget Bell.....	2.00
6" Large Iron Box Bell — 5 Ohms.....	7.50
8" " " " — 5 Ohms.....	12.00

Partrick & Wilkins Buzzers

Standard 2 1/4" Iron Box Buzzer Adjust. Dbble. Coil.....	Price \$.75
Nickel-plated Watch Case Buzzer.....	1.06
" Midget Buzzer—1 1/4" x 1 1/4".....	1.90
Flush Buzzer—2 1/4" x 4 1/4".....	3.30
Oak Wood Box Buzzer—3" x 4 1/4".....	1.90

Partrick & Wilkins Wood Box Bells

	2½"	3"	4"	5"	6"
Regular Gong.....	\$2.00	\$2.10	\$2.40	.....	6.40
Dinner "		6.00	8.25	\$11.20	13.20
Cow "		6.30	9.60	13.65	15.60

Stanley & Patterson

Name	No.	Description	2½ Bell or Buzz	3" Bell	4" Bell	Cow or Sigh.
Eclipse	200-1-2	Non-Adjust. Class C.....	\$.75			
PRXXX	210 to 18	Adjustable Class B.....	1.00	\$1.20	\$1.60	\$1.70
Marlo	220 to 28	Adjustable Class A.....	1.35	1.60	1.85	2.25
"	231 to 60	Transformer Type.....	6.15	6.35	6.85	8.60
Eclipse	208	Combina. Bell & Buzzer.....	1.25			
Monitor	238	Monitor Bell N. P.....		1.80		
P R	240-261	Watch Case Buzz. Adjust.....	1.25			
P R	265-266	" " Non-Adj.....	1.00			

Schwarze Small Iron Box Type

No. 31 & 32	2½" Bell	Buzzer	3" Bell	4" Bell
Price Each.....	\$.65	\$.60	\$1.00	\$1.45

SKELETON BELLS

Any Make

	2½"	3"	4"	5"	6"	8"	10"	12"
Class A....	\$5.75	\$6.00	\$7.25	\$9.40	\$10.60	\$16.00	\$25.00	\$31.50
" B....	.....	5.60	6.65	7.85	8.95	14.45	21.40	27.60

BELL PUSH BUTTONS, TREADS, ETC.

PUSH BUTTONS, ETC.
Ansonia

Round Stamped		Price
D-33	1 1/4" Diameter.	\$.80
506	1 1/4" Diameter Fixed Back.	.25
507	With Card Holder.	.40
513	1 1/4" Diam. Loose Back.	.75
514	1 1/4" " " "	.35
515	2 1/4" " " "	.45
516	2 1/4" " " "	.20
579	1 1/4" " 562 Center.	.80

Round Cast

508 & 510	2 1/4" Diam.	\$1.25
511	1 1/2" Loose Back	.75
512	2 1/4" " "	1.25
540	2 1/4" " "	.70
550	2 1/4" " "	.95
570	2 1/4" " "	.85

Other Ansonia Push Buttons, Etc.

D-33	Desk Push.....	\$.50
F-33	Stamped Flush Push.....	.80
G-33	" Diamond Push.....	.80
505	Wood Pear Push.....	.65
521-524	Stamped Push.....	.85
525 to 524	" " " ".....	1.05
530-536	" " " ".....	1.25
535	" Oblong Push.....	1.60
541	Oblong for Card.....	2.10
543	" " 2 Point.....	1.60
544	" " For Card.....	1.60
545	2 Gang Oblong for Cards.....	2.30
545	3 " " " ".....	3.35
545	4 " " " ".....	4.60
546	Oblong 2 Gang.....	2.10
547	" " 2 ".....	1.90
548	" " Sgle. Gang.....	.85
549	" " " ".....	1.50
562	Desk Push.....	.45
577	Diamond Push.....	.80
578	" " " ".....	.85
	Wood Push Button.....	.20

Bells, Push Buttons, Etc.

Brackets for Insulators

Other Ansonia Push Buttons, Etc.—Continued

Table Clamp No. 571 without Cord, Floor Push or Plug.....	\$.95
Floor Push No. 560—Nickel.....	.85
Under Floor Plate No. 561 Nickel.....	1.05
Combination Floor Pushes Complete No. 573.....	3.10
No. 575.....	3.40
Daisy Floor Tread Complete.....	1.65

Edwards

No. 600	2 1/4" Diam. Round.....	\$.20
No. 601	2 1/4" Diam. for Card Round.....	.40
No. 603	1 1/2" Diam. Round.....	.20
No. 606	Oval.....	.30
No. 609	Oval 2 x 4 1/2.....	.45

Oblong Push Buttons

No. 602	2 Gang for Cards.....	\$1.05
No. 604	Oblong.....	.40
No. 605	Oblong.....	.40
No. 607	Single for Cards.....	.40
No. 608	.....	.45

DESK BUTTONS

Edwards

No. 59	3/4" Hole.....	\$.80	No. 621	3/4" Hole.....	\$1.45
No. 63	1/2" ".....	.75	No. 622	1/2" ".....	1.50
No. 620	1/2" ".....	.45	No. 625	3/8" ".....	.50

OTHER BUTTONS

Edwards

No. 235	Floor Plug with Remov. Plug & Extension.....	\$.85
No. 72	" " & Receptacle.....	1.90
	Plug Only.....	.80
	Receptacle Only.....	1.40
No. 209	Dixie Floor Tread.....	1.60
No. 206	Table Clamp.....	1.10
No. 67	Pendant Push Oak or Mahogany \$.75—White.....	1.95
No. 268	" " White Celluloid.....	1.95
No. 68	Metal Pearl Push.....	.75

DOOR & WINDOW SPRINGS

Edwards

Number.....	28	28C	30	30C	32	34	38	39	236
Price.....	\$.60	\$.85	\$.90	\$1.10	\$1.60	\$.45	\$.50	\$.50	\$1.10

(For Door Openers, See Page PL-20.)

ROUND PUSHES

Partrick & Wilkins

No. 2	Wood Push Spiral Spring.....	\$.15
No. 1	" " Silver Spring.....	.40
No. 1	2 Way or Open-closed Circuit.....	.65
No. 27	Stamped Brass 2 1/4 inch.....	.23
No. 29	" " 1 1/2 ".....	.23
No. 25	" " Sgl. Card Holder.....	.40
No. 9	Cast Brass 2 1/4 inch Round.....	.85
No. 8	" " 1 1/2 ".....	.95

DESK TYPE

Partrick & Wilkins

Midjet 3/4" Hole.....	\$.90
Desk 1/2" Hole.....	.40
Mite 1/2" Hole.....	.75
Multiple 4 Contacts.....	1.35
Pony Return.....	1.95

OBLONG PUSHES

Partrick & Wilkins

No. 50	Stamped Brass.....	\$.35
No. 55	" ".....	.40
No. 708	Button & Speak.....	1.40
No. 907	2 Button & Card.....	2.15
No. 908	3 " ".....	3.00
No. 909	4 " ".....	4.55
No. 44	Cast Brass Screw Cap.....	1.45
No. 16	" ".....	1.60
No. 31	" ".....	2.45

PEAR SHAPED BUTTONS

Partrick & Wilkins

Compound Maple 2 Button.....	\$2.00
" " 3 ".....	2.95
No. 2 Plain, 2 Parts.....	.25
No. 3 Plain Solid Maple.....	.55
No. 4 Fancy, 2 Parts.....	.30
Wood Rosettes for above.....	.40

TABLE & FLOOR PUSHES

Partrick & Wilkins

Improved Table Clamp N. P. Finish.....	\$1.10
Flat Top Push Fibre Base Felt Bottom.....	1.15
Foot Push with Plug Combination.....	.90
" " without Plug Combination.....	.80
" " Plug Only.....	.30
" " Center Bolt Only.....	.20
Auto Foot Push Combination.....	4.00

DOOR & WINDOW SPRINGS

Partrick & Wilkins

No. 1 Door Spring.....	\$.40	Single Window Spring....	\$.85
Make & Break Type.....	.45	Double ".....	.80
Door Trip.....	1.90	Transom Spring.....	1.85
Closed Circuit Door Spring.....	.45	Cld. Circuit Window Spr.....	1.10

March, 1929

BRACKETS FOR INSULATORS

WOOD BRACKETS

	Each		Each
1 1/4" x 2" x 10".....	\$.10	1 1/4" x 2" x 12".....	\$.11
1 1/4" x 2" x 12".....	.10	2" x 2 1/4" x 12".....	.12
1 1/4" x 2 1/4" x 12".....	.10	2" x 2 1/4" x 12".....	.12

PINS

	Each		Each
Locust 1 1/4" x 8".....	\$.10	Locust 1 1/4" x 9".....	\$.12
Oak 1 1/4" x 8".....	.05	Oak 1 1/4" x 9".....	.08

HOUSE BRACKETS WITHOUT INSULATORS

Peirce

No.	Light Type	Points	Price	No.	Heavy Type	Points	Price	No.	Corner Type	Points	Price
153	One	1	\$.25	154	One	1	\$.40	150	One	1	\$.30
253	Two	2	.60	254	Two	2	.80	242	Two	2	.60
353	Three	3	.90	354	Three	3	1.10	342	Three	3	.85

WIREHOLDERS WITH INSULATORS

Peirce

No.	Wires	Spacing	Price
1607	One	0	\$.25
180	"	0	.30
191	"	0	.30
296	Two	6	.55
299	"	9	.60
394	Three	4 1/2	.80
396	"	6	.85

HOUSE RACKS WITH INSULATORS

Peirce

No.	Wires	Length	Space	Price
183	1	6 1/4	0	\$.40
286	2	12 1/2	6	.80
383	3	12 1/2	3	.95
386	3	18 1/2	6	1.20

SECONDARY RACKS WITH INSULATORS

Peirce

No.	Light Type	Wires	Space	Price	No.	Heavy Type	Wires	Space	Price
276	2	6"	6"	\$.90	278	2	8"	8"	\$1.30
376	2	6"	6"	1.30	378	3	8"	8"	2.05
1276	2	6"	6"	1.85	1278	2	8"	8"	1.30
1376	2	6"	6"	1.20	1374	3	4"	4"	1.40
2768	2	8"	8"	1.90					
3768	3	8"	8"	1.35	1378	3	8"	8"	2.05

INSULATORS ONLY FOR ABOVE BRACKETS

Peirce

355 Insulator.....	\$.20	1602 Insulator.....	\$.12
356 ".....	.25	1603 ".....	.10

HOUSE BRACKETS WITHOUT INSULATORS

National Elec. Products

No.	Light Type	Points	Price	No.	Heavy Type	Points	Price	No.	Corner Type	Points	Price
108-10	1	1	\$.25	109-10	1	1	\$.40	111-10	1	1	\$.30
				123-6-7	1		.35				
108-26	2	2	.60	109-26	2	2	.80				
108-29	2	2	.65	109-29	2	2	.85	111-29	2	2	.60
108-36	3	3	.95	109-36	3	3	1.20	111-36	3	3	.85

HOUSE RACKS WITH INSULATORS

National Elec. Products

No.	Light Type	Points	Length	Each	No.	Heavy Type	Points	Length	Each
104-10	1	5 1/4	5 1/4	\$.40	101-24	2	9 1/4	9 1/4	\$1.15
104-26	2	11 1/4	11 1/4	.85	101-28	3	13 1/4	13 1/4	1.70
104-33	3	11 1/4	11 1/4	.95	101-34	3	13 1/4	13 1/4	1.80
104-36	3	15	15	1.25	101-38	4	21 1/4	21 1/4	2.35
					101-44	4	17 1/4	17 1/4	2.20
104-53	5	18	18	1.65	101-54	5	21 1/4	21 1/4	2.65
104	Insulator Only			.10	101	Insulator Only			.20

WIREHOLDER ACCESSORIES

National Elec. Products

No. 5000 Corner Chair....	\$.13	No. 5040 Break Arm Strap....	\$.14
No. 5020 Insulator.....	.18	No. 5051 " " Bolt.....	.20
No. 5021 U Bolts & Nuts..	.10	No. 5052 T Head Screw.....	.03

SINGLE POINT WIREHOLDERS

National Elec. Products

No.	Price	No.	Price	No.	Price	No.	Price
5211.....	\$.25	5311.....	\$.20	5411.....	\$.35	5511.....	\$.24
5214.....	.35	5314.....	.80	5414.....	.40	5514.....	.40
5215.....	.45	5315.....	.35	5415.....	.50	5515.....	.40

WIREHOLDERS WITH INSULATORS

National Elec. Products

No.	For One Wire	Each	No.	For Two Wires	Each	No.	For Three Wires	Each
No. 5011.....		\$.30	No. 5002.....		\$.60	No. 5003.....		\$.90
No. 5001.....		.25	No. 5012.....		.60	No. 5023.....		.85

WIREHOLDERS WITH INSULATORS National Elec. Products

No.	Light Type Points	Length	Each	No.	Heavy Type Points	Length	Each
105-1X	1	6"	.30	105-1	1	6"	.60
105-1	1	6"	.30	105-10	1	6"	.65
105-10	1	4 1/2"	.30	105-25	2	11 1/2"	1.30
105-25	2	10 1/2"	.55	105-26	2	11 1/2"	1.30
105-26	2	13 1/2"	.60	105-29	2	14 1/2"	1.35
105-34	3	13 1/2"	.85	105-36	3	17 1/2"	1.90
105-36	3	16 1/2"	.90	105-36X	3	17 1/2"	1.05
105	Insulator Only		.18	106	Insulator Only		.10

B-SUNDRIES, BOLTS, ETC.

CARRIAGE BOLTS Galvanized

	Length	3"	3 1/2"	4"	5"	5 1/2"	6"
1/2" Diam. Each..		\$.05	\$.05	\$.05	\$.05	\$.07	\$.07
3/4" " " " "		.08	.09	.09	.10	.11	.12

MACHINE BOLTS WITHOUT WASHERS Galvanized

Diam.	3"	4"	5"	6"	7"	8"	10"	12"	14"	16"	18"
1/4" Each.....	\$.05	\$.06	\$.07	\$.08	\$.10	\$.12	\$.14	\$.16	\$.20	\$.22	\$.25
3/8" " " " "	.08	.10	.12	.14	.16	.18	.20	.22	.24	.27	.31
1/2" " " " "	.10	.12	.14	.16	.18	.20	.22	.24	.27	.29	.31
3/4" " " " "	.12	.14	.16	.18	.20	.22	.24	.27	.29	.31	.34
1" " " " "	.14	.16	.18	.20	.22	.24	.27	.29	.31	.34	.46

STOVE BOLTS Round or Flat Head

Length	3"	4"	5"	6"	7"	8"	10"	12"	14"	16"	18"
Up to 1" Long Per Dozen.....	\$.10	\$.10	\$.10	\$.10	\$.12	\$.15	\$.20	\$.22	\$.25	\$.27	\$.31
1 1/4" to 1 1/2" " " " "	.10	.10	.10	.10	.12	.15	.20	.22	.25	.27	.31
1 1/2" to 2" " " " "	.10	.10	.10	.10	.12	.15	.20	.22	.25	.27	.31
2" to 3" " " " "	.10	.10	.10	.10	.12	.15	.20	.22	.25	.27	.31
3" to 4" " " " "	.10	.10	.10	.10	.12	.15	.20	.22	.25	.27	.31

TOGGLE BOLTS, STEEL "Paine"

Size—Diameter	2"	3"	3 1/2"	4"	5"	6"
1/4" Long Price Each.....	\$.10	\$.10	\$.10	\$.10	\$.11	\$.12
1/2" " " " "	.10	.10	.10	.10	.11	.13
3/4" " " " "	.10	.10	.10	.10	.11	.13
1" " " " "	.11	.11	.12	.12	.13	.13
1 1/4" " " " "	.12	.13	.13	.14	.14	.15

NOTE: For Brass Toggle Bolts—2 1/2 times above prices.

FIXTURE BLOCKS Round

	4 & 5" Round	6 & 7" Round
1/4" or 1/2" Plain.....	\$.25	\$.30
1/4" or 1/2" Slotted.....	.35	.40
Ceiling Button—P & S Porcelain No. 170—Each.....		\$.12
Switch Bases—See Snap Switches Page PL-19.		

CORDS, FIXTURE, LAMP AND HEATER

SINGLE FIXTURE CORD

Single Lamp Cord	Type	No. 18	No. 16	No. 14	No. 12
Single Cotton Covered Cord—Light F-64		\$.01	.....	.....	.....
Single Cotton Covered Cord—Heavy F-32		.01 1/2	.02	.03	.04
Single Artificial Silk Cord—Heavy.. F-32		.02	.03	.04	.....

DOUBLE LAMP CORD

Regular Lamp Cord	Type	No. 18	No. 16	No. 14	No. 12
Cotton Covered Twisted Pair.....	C	\$.02 1/2	\$.04	\$.06	\$.10
" " Parallel Pair.....	PO	.03 1/2	.04	.07	.....
" " Twisted Parallel Pair.....	PD	.04	.05	.....	.....
Artificial Silk Twisted Pair.....	C	.03 1/2	.05	.08	.....
" " Parallel Pair.....	PO	.04	.05	.08	.....

REINFORCED CORD

Not Asbestos	Type	No. 18	No. 16	No. 14	No. 12
Cotton Covered Light Type 1/4" PS		\$.04	\$.05	\$.07	.....
" Heavy 1/2" P		.05	.06	.08	\$.12
Weatherproof Light Type 1/4" PSWP		.03 1/2	.05	.....	.....
" Heavy Type 1/2" PWP		.04 1/2	.05 1/2	.08	.....

HEAVY DUTY PORTABLE CORD "Duracord" or Similar. Extra Reinforced

	No. 18	No. 16	No. 14	No. 12	No. 10
Type PS Light 2 Cond. Port. Cord..	\$.09	.....	.....	.....	.....
" P Heavy 2 " " " " "	.14	.17	.21	.25	.31
" " 3 " " " " "	.....	.18	.26	.33	.41

ALL RUBBER CORD

"Tirex" "Royal" "Super" "Indestructo" or Similar

	No. 18	No. 16	No. 14	No. 12	No. 10
SJ Junior 2 Conductor Black.....	\$.07	\$.10	.....	.....	.....
" " 2 " Green.....	.08	.12	.....	.....	.....
" " 3 " Black.....	.12	.15	.....	.....	.....
S Type Heavy 2 Conductor Black..	\$.12	\$.15	\$.23	\$.28	\$.34
" " 3 " " " "	.18	.21	.28	.33	.45
" " 4 " " " "	.20	.23	.34	.41	.57
" " Sgle. Cond. Black..	.07	.08	.09	.10	.12

HEATER CORD

Asbestos Covered	No. 18	No. 17	No. 16	No. 14	No. 12
Stand. Twisted or Wound Asbest. 1/4	\$.04	.....	\$ .06	\$.10	\$.12
American Beauty Heater Cord.....	.....	.09	.....	.11	.20
Rockbestos Heater Cord.....	.06	.07	.08	.10	.20

"Deltabeston" Heater Cord	No. 18	No. 16	No. 14	No. 12
Type A Asbestos Braid overall.....	\$.12	.....	\$ .13	\$.14
" C Cotton Braid overall.....	.09	.....	.11	.12
" D " " on ea. cond.....	.10	.....	.12	.13
" E Cotton on ea Cond. & over both.....	.11	.....	.13	.14

NOTE—For Armored Cords See Page PL-9.

" Extension Cords See Page PL-10.

" Fixture Wire See Pages PL-26 & 27.

" Bell Wire See Page PL-27.

MISCELLANEOUS CORD

Description	Type	No. 18	No. 16	No. 14	No. 12	No. 10
x Brewery Cord.....	CB	\$.04	\$.05	\$.07	.....	.....
x Canvasite Cord.....	CC	.06	.07	.09	.....	.....
x Deck Cable.....	PWP	.07	.08	.09	.....	.....
x Packinghouse Cable.....	PKWP	.07	.08	.09	.....	.....
x Stage & Theatre Cable.. T		.06	.08	.09	\$.13	\$.16

x Note—These prices are based on less than coil lot trade prices.

CONDUCTING BELL CORD

Spun Silk

Number of Conductors	2	3	4	5	8	10	14	18
Cond. Cond. Cond. Cond. Cond. Cond. Cond. Cond.								
Price Per Foot.....	\$.08	\$.18	\$.20	\$.21	\$.28	\$.38	\$.68	\$.88

Note—For Armored Lamp Cord See Page PL-9.

CONDUIT, ELBOWS, COUPLINGS, BUSHINGS, ETC.

RIGID CONDUIT

	Black Per Foot	Galvd. Per Foot	Cutting & Threading Per Thread	Cutting Only Per Cut
1/2".....	\$.10	\$.11	\$.20	\$.10
3/4".....	.13	.14	.20	.10
1".....	.18	.20	.25	.10
1 1/4".....	.25	.28	.30	.15
1 1/2".....	.31	.34	.35	.15
2".....	.43	.44	.40	.20
2 1/2".....	.68	.70	.50	.25
3".....	.83	.90	.60	.30
3 1/2".....	1.05	1.15	.70	.30
4".....	1.31	1.39	.80	.30

ELBOWS, COUPLINGS, BUSHINGS, LOCKNUTS

Price Each

Size Each	Bends or Elbows Black Galv.	Couplings Black Galv.	Bushings Galv.	Locknut Galv.	Erickson Coupl. Galv.
1/2".....	\$.16	\$.18	\$.10	\$.11	\$.02
3/4".....	.20	.24	.14	.14	.03
1".....	.30	.35	.18	.20	.06
1 1/4".....	.42	.45	.25	.26	.10
1 1/2".....	.55	.63	.31	.34	.13
2".....	.90	1.00	.40	.45	.24
2 1/2".....	1.40	1.70	.58	.64	.35
3".....	3.75	4.25	.80	.88	.55
3 1/2".....	8.35	9.25	1.00	1.08	.50
4".....	9.50	10.90	1.30	1.37	.68

Also on Page PL-10.

Also on Page PL-5.

Also on Page PL-15.

FLEXIBLE METALLIC CONDUIT

"Greenfield", "Flexsteel", or Equivalent

	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Single Strip Per Foot....	\$.07	\$.07	\$.09	\$.14	\$.26	\$.43
Double Strip Per Foot....	.09	.09	.12	.16	.29	.49

For Fittings for Metallic Conduit See Page PL-14.

For Non-Metallic Conduit or Loom See Page PL-15.

For Steel Armored Cable & Lead Covered See Page PL-8.

CABLE, ARMORED & NON-METALLIC SHEATHED

ARMORED CABLE, BX OR SIMILAR

			Price Per Foot		
			No. 14	No. 12	No. 10
SINGLE CONDUCTOR	Solid	Single Strip	\$.09	\$.10	\$.11
	Stranded	Double "	.12	.13	.14
TWO CONDUCTOR	Solid	Single "	.08	.10	.14
	Stranded	Double "	.08	.13	.18
THREE CONDUCTOR	Solid	Single "	.09	.14	.18
	Stranded	Double "	.12	.18	.23
FOUR CONDUCTOR OVALFLEX	Solid	Single "	.17	.21	.27
	2 Conductor	Double "	.21	.27	.34
	3	Single "	.07	.10	.13
		Double "	.10	.14	.18
			Price Per Foot		
			No. 8	No. 6	No. 4
SINGLE CONDUCTOR	Solid	Single Strip	\$.10	\$.15	....
	Stranded	Double "	.16	.18	....
TWO CONDUCTOR	Solid	Single "	.13	.16	\$.27
	Stranded	Double "	.17	.20	.34
THREE CONDUCTOR	Solid	Single "	.23	.33	.51
	Stranded	Double "	.29	.40	.62
FOUR CONDUCTOR OVALFLEX	Solid	Single "	.35	.50	.82
	2 Conductor	Double "	....	....	....
	3	Single "	....	....	....
		Double "	....	....	....

LEAD COVERED ARMORED CABLE

			Price Per Foot		
			No. 14	No. 12	No. 10
Single Conductor Solid Lead Covered	.....	.....	\$ .12	\$.15	....
" " Stranded " " " "	.....	.....	....	....	\$ .17
Two " " Solid " " " "	.....	.....	.23	.30	.38
" " Stranded " " " "	.....	.....	....	....	....
Three " " Solid " " " "	.....	.....	.30	.39	.48
" " Stranded " " " "	.....	.....	....	....	....
			Price Per Foot		
			No. 8	No. 6	No. 4
Single Conductor Solid Lead Covered	.....	.....	\$ .20	\$.27	\$.33
" " Stranded " " " "	.....	.....	....	....	....
Two " " Solid " " " "	.....	.....	.59	.82	1.10
" " Stranded " " " "	.....	.....	....	....	....
Three " " Solid " " " "	.....	.....	.70	1.22	1.48
" " Stranded " " " "	.....	.....	....	....	....

ARMORED LAMP CORD

			Per Foot		
			No. 18	No. 16	No. 14
Plain Armored Lamp Cord	.....	.....	\$ .12	\$.13	\$.17
Reinforced Lamp Cord	.....	.....	.19	.22	.30

Add 20% for Double Strip

NON-METALLIC SHEATHED CABLE "Romex", "Loomwire", "Wireflex", or similar

			Price Per Foot		
			No. 14	No. 12	No. 10
2 Wire Without Ground Wire	.....	.....	\$ .05	\$.07	\$.10
3 " With " " " " " "	.....	.....	.05½	.07½	.10½
3 " Without " " " " " "	.....	.....	.08	.11	.15
3 " With " " " " " "	.....	.....	.08½	.11½	.15½
			Price Per Foot		
			No. 8	No. 6	No. 4
2 Wire Without Ground Wire	.....	.....	\$ .15	\$.20	\$.26
3 " With " " " " " "	.....	.....	.15½	.20½	.27½
3 " Without " " " " " "	.....	.....	.23	.30	.40
3 " With " " " " " "	.....	.....	.23½	.30½	.41
Fittings	.....	.....	....	....	....
Straps Each	\$.01	\$.01	\$.01	\$.01	\$.01
Clip (Open Wiring) Each	.03	.03	.03	....	....
Connectors Threadless Ea.	.07	.07	.07	....	....
" Threaded Ea.	.10	.10	.20	.30	.50

CUTOUTS OR FUSE BLOCKS

PLUG CUTOUTS 125 Volts, 30 Amp. Porcelain

		Price		
		Universal No.	Standard Open Type	Covered Type
Single Pole—Main Line	.....	62569	\$.25	....
Double " " " " " "	.....	62965	.35	\$.50
Triple " " " " " "	.....	62165	.50	.65
Double Pole Single Branch	.....	61935	.35	.65
" " Double " " " "	.....	62587	.55	1.00
" " Cross " " " "	.....	8020	.35	....
Triple to D. P. Double Branch	.....	62199	.55	1.10
Triple Pole Single Branch	.....	8042	.60	1.10
" " Double " " " "	.....	62135	.85	1.75

DEAD FRONT PLUG CUTOUTS

With Covers

		Benjamin 30 Amps.	4 Circ.	8 Circ.	12 Circ.	16 Circ.
With Flush Cover 59904-8-12-16	.....	\$1.80	\$3.50	\$5.50	\$7.00	....
With Overhanging Cover 59804-8-12-16	.....	2.00	4.00	6.00	7.75	....

DEAD FRONT PLUG CUTOUTS—Continued

		BRYANT		With Short Cover	With Long Cover
Double Pole Single Branch No. 71935	\$.95	....
" " Double Branch No. 72587 & 82587	1.45	\$1.65
Triple to Dble. Pole Dbl. Branch No. 72199 & 82199	1.55	1.65

CARTRIDGE CUTOUTS

		Porcelain Base, 250 Volts			0-30 Amp.	31-60 Amp.	61-100 Amp.
Single Pole Main Line Enclosed Porcelain	\$.40	\$.75	\$1.45
Double " " " " " "60	1.45	3.00
Triple " " " " " "85	2.10	4.20
Double Pole Two Wire Single Branch Porcelain75	2.00	....
" " Double " " " "	1.40	3.70	....
Double Pole Three Wire Double Branch Porcelain	1.75	4.85	....
Triple Pole Three Wire Single Branch Porcelain	1.45	3.20	....
Triple Pole Three Wire Double Branch Porcelain	2.40	6.35	....

		Slate Base, 250 Volts					
		30 A.	60 A.	100 A.	200 A.	400 A.	600 A.
Single Pole-Slate Base-250 V.	.....	\$ .45	\$.70	\$1.60	\$2.75	\$6.75	\$9.20
Double " " " " " "	.....	....	....	2.75	....	....	....
Triple " " " " " "	.....	....	....	4.15	....	....	....

		Slate & Porcelain, 600 V.					
		30 A.	60 A.	100 A.	200 A.	400 A.	600 A.
Single Pole-Porcelain Base	.....	\$ .65	\$.95	\$1.90	\$2.65	....	....
" " Slate Base	.....	.75	1.05	1.90	3.00	\$7.75	\$10.05

NOTE—Cartridge Cutouts are sometimes called Enclosed Cutouts.

C-SUNDRIES

GROUND CLAMPS

		Standard Adjustable Ground Clamps, any make.				¾" to 1" ¾" to 2" ¾" to 3"
Blackburn No. 3 & 5 with Light Copper Band	\$.10 \$.15 \$.20
" " No. 4 & 6 with Heavy Copper Band25 .30 .30

		Other Types							
		8 x ¾"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"
Chase Shawmut 3661-68	.....	\$ .20	\$.25	\$.30	\$.35	\$.40	\$.45	\$.50	\$.55
G. V. A Series 8000	.....	.30	.32	.40	.45	.51	.58	.65	.72
G. V. S Series 8000	.....	.12	.15	.16	.17	.22	.28	.35	.42

STRAPS, CLIPS OR CLAMPS

For Pipe, Without Screws

		Tinned Straps, 2 Hole							
		¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	3 ½"
Light Steel Straps, 1 Hole	.....	\$ .01	\$.01	\$.01	\$.01½	\$.02	\$.03	\$.04	\$.05
Mall. Iron Straps, 1 Hole	.....	.03	.03	.05	.07	.08	.10	.15	.20
Tinned Pipe Straps—Per Pound	.....	.07	.08	.10	.15	.25	.45	.70	.95

(See Also Page PL-25)

COLORING & FROSTING LIQUID

		7 ounce Cans	15 ounce Cans	30 ounce Cans	½ Pint Bottle	1 Pint Bottle	Quart Bottle
Crescent (McGill)	.....	\$2.60	\$4.20	\$7.25	\$1.10	\$2.00	\$4.10
Celco	.....	....	....	....	....	2.00	4.10
Franco	.....	....	....	....	....	....	....

CLUSTERS

Benjamin, Wireless & Adjustable

Multiple Wireless		Series Wireless		Adjustable Type	
No. 12.....	\$1.75	No. 12½....	\$1.75	No. 841.....	\$1.50
No. 13.....	2.00	No. 13½....	2.00	No. 842.....	1.75
No. 14.....	2.30	No. 14½....	2.30	No. 852.....	1.90
No. 15.....	2.65	No. 15½....	2.65	No. 853.....	2.10
No. 16.....	2.90	No. 32½....	2.00	No. 877.....	2.25
No. 22.....	1.50	No. 33½....	2.25	No. 878.....	3.20
No. 23.....	1.75	No. 34½....	2.50	No. 880.....	2.25
No. 24.....	2.00	No. 35½....	2.80	No. 881.....	2.75
No. 33T.....	2.25			No. 890.....	2.20
No. 34T.....	2.50			No. 891.....	3.00
No. 82.....	1.15				
Clips for Loom.....				\$.02 Each or \$ for \$.05	
Crowfeet "12", "K", "4" Each.....				.05	
				.10	

PL-10

Cord & Wire Connectors

Fittings, Conduit

CORD & MOTOR CONNECTORS

Arrow	No.	Complete Price	Body Only Price	Cap Only Price
Midget Comp.	8238	.35		
" Arrolite	8239	.45		
Motor Conn.	RP-8221	.55	.50	.10
" "	RL-8221	.65	.60	.20
" "	RA-8222	.55	.50	.15
" "	RM-8222	.70	.60	.25
" "	TM-8222	.70	.60	.25
" "	RH-8224	.90	.85	.30
" "	RG-8281	.90	.85	.30
" "	8330 to 33	.75		
" "	8334 to 37	.90		
Bryant				
Motor Conn.	KR-130	.55	.40	.20
" "	KG-103	.60	.40	.20
" "	KT-130	.50	.40	.10
Hubbell				
Cord Connector	5894	.60	.45	.20
" "	6116	.55	.45	.15
" "	6179	.55	.45	.20
" "	6180	.55	.45	.15
" "	5518	.60	.45	.20
" "	7083	1.25	.80	.50
" "	7090	1.75	1.00	.75

NOTE: For Attachment Plugs and other caps—See Pages PL-16 & PL-17.

DOSSERT SOLDERLESS CONNECTORS

Size of Conductor	Up to No. 3	3 to No. 1	No. 0	No. 2/0	No. 3/0	No. 4/0
2 Way S & Elbows.....	\$.65	\$.75	\$.80	\$1.00	\$1.20	\$1.40
Cable Taps.....	1.00	1.10	1.20	1.40	1.75	2.10
3 Way S & Y's.....	1.00	1.10	1.20	1.40	1.75	2.10
Lugs—All Types.....	.50	.60	.60	.70	.90	1.10

E-SUNDRIES

EXTENSION CORDS—MADE UP

With Attachment Plug & Socket, but Guards-Lamps & Handles Extra

Length in Feet	With Twisted Lamp Cord and Key Socket No. 18	With Reinforced Cord and Key Socket No. 18	With Artificial Silk Cord and Key Socket No. 18	Twist. or Paral. No. 18	No. 16
4 Foot.....	\$.95	\$1.05	\$1.10	\$1.00	\$1.10
6 ".....	1.00	1.15	1.20	1.10	1.20
8 ".....	1.05	1.25	1.30	1.20	1.30
10 ".....	1.10	1.35	1.40	1.30	1.40
12 ".....	1.15	1.45	1.50	1.40	1.50
14 ".....	1.20	1.55	1.60	1.50	1.60
16 ".....	1.25	1.65	1.70	1.60	1.70
18 ".....	1.30	1.75	1.80	1.70	1.80
20 ".....	1.35	1.85	1.90	1.80	1.90
22 ".....	1.40	1.95	2.00	1.90	2.00
24 ".....	1.45	2.05	2.10	2.00	2.10
Each Extra Ft. Add	.0234	.05	.06	.04	.06
Length in Feet	With All Rubber Cord and Weatherproof Socket				
	Light No. 18	No. 16	No. 18	Heavy No. 16	
4 Foot.....	\$1.25	\$1.40	\$1.45	\$1.55	
6 ".....	1.45	1.65	1.75	1.85	
8 ".....	1.65	1.90	2.05	2.15	
10 ".....	1.85	2.15	2.35	2.45	
12 ".....	2.05	2.40	2.65	2.75	
14 ".....	2.25	2.65	2.95	3.05	
16 ".....	2.45	2.90	3.25	3.35	
18 ".....	2.65	3.15	3.55	3.65	
20 ".....	2.85	3.40	3.85	3.95	
22 ".....	3.05	3.65	4.15	4.25	
24 ".....	3.25	3.90	4.45	4.55	
Each Extra Foot.....	.10	.13	.15	.17	

ELBOWS & BENDS

For Rigid Conduit

Size	1/2"	3/4"	1"	1 1/4"	1 1/2"
Black.....	\$.17	\$.22	\$.33	\$.43	\$.55
Galv.....	.19	.25	.38	.50	.65
Size	2"	2 1/2"	3"	3 1/2"	4"
Black.....	\$1.00	\$1.60	\$3.90	\$8.45	\$10.05
Galv.....	1.05	1.70	4.25	9.30	10.90

EXPANSION SHIELDS

For Wood Screws

Inside Diam.	3/8"	1/2"	5/8"	3/4"
Outside Diam.....	5/8"	3/4"	1 1/8"	1 1/4"
For Screws.....	5-6-7	8 to 11	9-10-11	12-13-14
Length.....	3/4 to 1"	3/4 to 1"	1 1/4"	3/4 to 1"
Price Each.....	\$.05	\$.06	\$.07	\$.06

Inside Diam.	3/8"	1/2"	5/8"	3/4"
Outside Diam.....	5/8"	3/4"	1 1/8"	1 1/4"
For Screws.....	12-14	15 to 18	15 to 18	22-24
Length.....	1 1/2 & 2"	3/4-1"	1 1/4"	2"
Price Each.....	\$.10	\$.07	\$.10	\$.15

For Bolts & Lag Screws

Size (Diam. of Screws) ..	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"
Price Each.....	\$.12	\$.15	\$.20	\$.27	\$.32	\$.40	\$.60	

FUSES

PLUG FUSES

Standard Plug Fuses—Any Make—\$.07 each or 5 for \$.25 (Some Manufacturers put these fuses up 4 in a box, in which case they should be retailed at 4 for \$.25.)

ENCLOSED FUSES, NON-RENEWABLE

Amps.	250 Volts	600 Volts
1 to 30.....	\$.10	\$.25
35 to 60.....	.20	.40
65 to 100.....	.55	1.00
110 to 200.....	1.10	1.75
225 to 400.....	2.00	3.65
450 to 600.....	3.60	5.30
650 to 800.....	8.00	9.75

Amps.	250 Volts	600 Volts
1 to 30.....	\$.20	\$.40
35 to 60.....	.30	.60
65 to 100.....	.85	1.65
110 to 200.....	1.75	2.55
225 to 400.....	3.00	5.55
450 to 600.....	5.65	8.05
650 to 800.....	12.10	15.00

RENEWABLE FUSES

Amps.	250 Volts	600 Volts	250 Volts	600 Volts
1 to 30.....	\$.50	\$ 1.10	\$.03	\$.05
35 to 60.....	1.00	1.25	.05	.06
65 to 100.....	2.00	3.00	.10	.10
110 to 200.....	4.00	5.00	.15	.15
225 to 400.....	7.50	11.00	.30	.30
450 to 600.....	11.00	16.00	.60	.60

FUSE WIRE

Size in Amps.....	1/4	3/8	1	2		
Price Per Pound.....	\$65.00	\$6.50	\$2.60	\$2.30		
Price Per Foot.....	.01	.01	.01	.01		
Size in Amps.....	3	5	6	10	15	
Price Per Pound.....	\$1.95	\$1.50	\$1.50	\$1.30	\$1.30	
Price Per Foot.....	.01	.01 1/2	.02	.02 1/2	.03	
Size in Amps.....	20	25	30	40	50	
Price Per Pound.....	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Price Per Foot.....	.04	.05	.07	.08	.10	
Size in Amps.....	60	70	75	80	90	100
Price Per Pound.....	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Price Per Foot.....	.15	.20	.21	.22	.24	.25

Fuse Strip Any Amperage.....\$1.00 per lb.

Fuse Strip Any Amperage....\$1.00 per lb.

OPEN LINK FUSES

Small Wire Type

Size in Amps.....	1 to 30	35 to 60	65 to 100
Amps.....	1 to 30	35 to 60	65 to 100
Chicago Fuse Numbers.....	00-0-1-2-3	2-3-5	5
Price Each.....	\$1.10	\$1.15	\$1.20

Large Strip Type

Size in Amps.....	25-100	110-200	225-400
Chicago Fuse Numbers.....	7	7 to 16	10 to 18
Price Each.....	\$.20	\$.30	\$.60
Size in Amps.....	425-600	601-800	801-1000
Chicago Fuse Numbers.....	10 to 18	25 & 28	28 & 30
Price Each.....	\$1.10	\$1.75	\$1.75

STAMPED SHEET METAL LINK FUSES

See Chicago Fuse Catalog

Type of Link.....	B	C	D	E-F-H-I-L-M
C to C Distance.....	1 1/4"	2 1/4"	2 3/4"	See Catalog
Price Each.....	\$.10	\$.10	\$.15	\$.30

FITTINGS, CONDUIT, THREADED

STANDARD TYPES, COVERS EXTRA

"Condulets" "Electrolets" "Taplets" "Unilets" "V. V."

Type	1/2"	3/4"	1"	1 1/4"	1 1/2"
A 1- Piece	\$.33	\$.44	\$.60	\$.87	\$1.12
B " "	.40	.50	.70	1.12	1.47
BE " "	.85	1.05	1.55	2.35	3.15
C 1- "	.50	.67	.83	1.32	1.71
CO " "	.70	.81	1.05	1.75	2.25
D " "	.45	.58	.80	1.32	1.71
E " "	.40	.50	.70	1.12	1.46
F 2 " "					
LB-LF-LR					
LBB-LFB-LLB-LRB	.55	.63	.81	1.47	1.96
LBL-LBR-LU-LUA	.81	1.12	1.33	1.75	2.80
T All One Size	.67	.80	1.12	1.71	2.37
TA All One Size	.98	1.05	1.40	2.18	3.22
TB-TL-TR	.68	.81	1.12	1.71	2.38
U-UB-UF	.65	.75	1.10	1.76	2.35
X All One Size	.84	1.09	1.47	1.96	2.50
Gaskets	.14	.14	.21	.28	.28
Reducers	.21	.21	.28	.42	.56
Unions	.63	.70	1.05	1.48	2.52

ELECTRICAL CONTRACTING

STANDARD TYPES, COVERS EXTRA—Continued

Type	2"	2½"	3"	3½"	4"
A 1-Piece	\$2.32	\$5.46	\$ 6.50	\$10.60	\$11.70
B " "	3.00	5.46	6.50	10.60	11.70
BE 2- "	3.65	5.46	7.30	9.10	16.65
C 1- "	5.45	10.60	11.70	19.90	22.10
CO " "	3.40	6.24	8.10	11.70	14.80
D " "	4.46	6.75	10.27	16.38	17.95
E " "	3.40	6.24	8.10	11.70	14.80
F 2- "	3.00	5.46	6.50	10.60	11.70
LB-LF-LL-LR	For Special Form 6 Fittings See Page PL-13.				
LBB-LFB-LLB-LRB	3.50	6.50	8.45	13.65	15.60
LBL-LBR-LU-LUA	3.72	8.52			
T All One Size	3.58	6.50	9.75	14.30	16.90
TA All One Size	5.53				
TB-TL-TR	3.58	6.50	9.75	14.30	16.90
U-UB-UF	4.20	7.80	10.15	16.38	18.75
X All One Size	4.90	7.80	13.00	16.90	20.80

Gaskets	.35	.52	.52	.65	.65
Reducers	.70	1.30	1.76	2.60	3.58
Unions	3.78	6.18	10.40		

NOTE: For Special Prices on Types F&L Entrance Fittings See Page PL-13.

COVERS

For Above

	½"	¾"	1"	1½"
Sheet Steel Blank Met. Cover	\$.11	\$.15	\$.33	\$.45
Cast-Iron	.21	.31	.59	.70
Porcelain with Holes	.14	.22	.35	.51
Metal with ¼ Nipple	.28	.35	.59	.65
" " ½ "	.33	.40	.54	.70
" " ¾ "	.35	.42	.56	.73
Porcelain with ¼ Nipple	.35	.42	.60	.82
" " ½ "	.42	.49	.67	.85
" " ¾ "	.49	.57	.74	.95
Porcelain for Drop Cord	.49	.56	.70	
Porcelain Weatherproof Sockets	.22	.35	.56	
Composition with Holes	.28	.42	.70	1.40
Composition Split with Holes	.66	.84	1.40	2.80

	1½"	2"	2½"	3"	3½"	4"
Sheet Steel Blank Met. Cover	\$.63	\$.79	\$1.05	\$1.12		
Cast Iron	.98	1.26	1.61	1.75		
Porcelain with Holes	.67	.84	1.12	1.26		
Metal with ¼ Nipple	.82					
" " ½ "	.86					
" " ¾ "	.88					
Porcelain with ¼ Nipple	1.01					
" " ½ "	1.06					
" " ¾ "	1.16					
Porcelain for Drop Cord						
Porcelain Weatherproof Sockets						
Composition with Holes	1.65	1.68				
Composition Split with Holes	3.10	3.36				

RECEPTACLES & ROSETTES

For Above

(For Description See Crouse Hinds' Catalog)	½"	¾"	1"
Lamp Receptacle without Shade Holder Groove	\$.35	\$.42	\$.50
" " with Shade Holder Groove	.42	.50	.56
Fixture Rosette with ¼ or ½ Nipple—Male or Female	.56	.63	.70
Cord Rosette with One Outlet	.42	.50	.56
" " Two Outlets	.50	.56	.63
Polarity Plug Receptacle for Hubbell 6 Amp.	.56	.63	.70
" " 20 "	.77	.85	.91
Attachment Plug Receptacle for Hubbell 6 Amp.	.56	.63	.70

FS SERIES FOR FLUSH DEVICES
Shallow Type Without Covers, Any Make

No. Gangs	No. Pipe Outlets	Series	½"	¾"	1"
Single Gang	One	FS-FSA	\$.91	\$1.08	\$1.19
" "	Two	FSC-FSL-FSR-FSLA-FSS-FSAA	1.05	1.26	1.54
" "	Three	FSCA-FSCC-FSCT-FST	1.40	1.75	2.03
" "	Four	FSX-FSCD	1.68	2.10	2.38
Two Gang	One	FS-FSA	1.68	1.82	1.96
" "	Two	FSC	1.82	1.96	2.17
" "	Three	FSD	2.03	2.17	2.31
2 Gang Tandem	One	FS	2.31	2.45	2.59
" "	Two	FSC	2.45	2.59	2.73
Three Gang	One	FS-FSA		2.52	2.73
" "	Two	FSC		2.66	2.87
" "	Four	FSD	2.73	3.01	3.32
Four Gang	One	FS-FSA		3.08	3.36
" "	Two	FSC-FSSE		3.29	3.50
" "	Five	FSD	3.44	4.00	4.34

COVERS FOR FS FITTINGS

Description	Single Gang	2 Gang
Metal Cover for Std. Flush Push Switches	\$.21	\$.42
" " " " Tumbler or Toggle Switches	.21	.42
" " " " Rotary Switches	.21	.42
Metal Cover for Single Flush Receptacle	.21	.42
" " " " Duplex Flush Receptacle	.42	.84
" " " " with Lift Cover	.84	1.68
" " " " for Disapp. Door Receptacle	1.12	2.24
" " " " with ¼ Metal Nipple	.49	
" " " " ½ "	.54	
" " " " ¾ "	.56	
Blank Metal Cover Sheet Steel	.14	.28
" " Cast-Iron	.35	.70
Porcelain Cover with Holes	.28	
Cast Cover with Guard for Push Switches	.49	.81

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COVERS FOR FS FITTINGS—Continued

Description	3 Gang	4 Gang
Metal Cover for Std. Flush Push Switches	\$.63	\$.84
" " " " Tumbler or Toggle Switches	.63	.84
" " " " Rotary Switches	.63	.84
" " " " Single Flush Receptacle	.63	.84
" " " " Duplex Flush Receptacle		
" " " " with Lift Cover	2.52	3.36
" " " " for Disapp. Door Receptacle		
" " " " with ¼ Metal Nipple		
" " " " ½ "		
" " " " ¾ "		
Blank Metal Cover Sheet Steel	.56	.84
" " Cast-Iron	1.05	1.40
Porcelain Cover with Holes		
Cast Cover with Guard for Push Switches	1.40	1.96

METAL COMBINATION PLATES FOR FS SERIES

2 Gang for One Switch and one Sgle. or Duplex Receptacle	\$.70
2 " " " " Bull's Eye with Ruby Glass	1.75
3 " " " " One Receptacle & one Bull's Eye	1.96

NOTE: Although our prices on conduit fittings apply to all makes we use Crouse Hinds' numbers and lists for convenience.

G & H WITHOUT ADJUSTABLE BAR

Type Crouse Hinds or Similar	5 Amp. ½"	1"	10 Amp. ¾"	1"
G.	\$.56	\$.70	\$.70	\$.91
GL.	.63	.77	.77	.98
GA-GLA-GT.	.84	.98	.98	1.19
GTA-GX.	1.05	1.19	1.19	1.40
H.	.42	.56	.56	.77
HA.	.49	.63	.63	.84
HH.	.56	.70	.70	.91
HHC.	.84	.98	.98	1.19
HLA.	.63	.77	.77	.98

Type Crouse Hinds or Similar	20 Amp. ¾"	1"
G.	\$.90	\$1.05
GL.	1.05	1.19
GA-GLA-GT.	1.26	1.40
GTA-GX.	1.50	1.68
H.	.84	.91
HA.	.91	.98
HH.	.98	1.05
HHC.	1.26	1.40
HLA.	1.05	1.19

G & H WITH ADJUSTABLE BAR

Type Crouse Hinds or Similar	5 Amp. ½"	1"	10 Amp. ¾"	1"
G.	\$.77	\$.91	\$.91	\$1.12
GL.	.84	.98	.98	1.19
GA-GLA-GT.	1.05	1.19	1.19	1.40
GTA-GX.	1.26	1.40	1.40	1.61
H.	.63	.77	.77	.98
HA.	.70	.84	.84	1.05
HH.	.77	.91	.91	1.12
HHC.	1.05	1.19	1.19	1.40
HLA.	.84	.98	.98	1.19

Type Crouse Hinds or Similar	20 Amp. ¾"	1"
G.	\$1.26	\$1.33
GL.	1.33	1.50
GA-GLA-GT.	1.54	1.68
GTA-GX.	1.75	1.96
H.	1.12	1.19
HA.	1.19	1.26
HH.	1.26	1.33
HHC.	1.54	1.68
HLA.	1.33	1.50

COVERS FOR G & H SERIES

	Without Adjustable Bar	With Adjustable Bar
	5 Amp. 10 Amp. 20 Amp.	5 Amp. 10 Amp. 20 Amp.
Porcelain	\$.28 .35 .56	\$.21 .21 .49
Blank Metal	.21 .28 .35	.14 .14 .35
Porcelain with ¼ Nip.	.42 .49 .70	.35 .35 .63
" " ½ "	.49 .56 .77	.42 .42 .70
" " ¾ "	.56 .63 .91	.49 .49 .84
Metal	.35 .42 .49	.28 .28 .42
" " ½ "	.42 .49 .56	.35 .35 .49
" " ¾ "	.49 .56 .63	.42 .42 .56

DEVICES FOR G & H SERIES

(See Page 51 Crouse Hinds Catalog No. 2000)

	Price Each
Lamp Receptacle with Shade Holder Groove No. H546	\$.70
Fixture Rosette Porcelain with ¼ Nipple No. H549 & H548	.77
" " " " No. H551 & H552	.91
Fixture Rosette Composition with ¼ Nipple No. H571 & H572	1.05
Cord Rosette Porcelain H553	.60
" " Composition H554	.70
Lamp Receptacle—One Piece—No. H556 or 557	.35

J & K SERIES WEATHERPROOF

	½"	¾"	1"
J	\$.84	\$1.05	\$1.50
JA-JB-JU.	.98	1.19	1.61
L.	1.19	1.33	1.50
T.	1.33	1.50	1.61
X.	1.50	1.61	1.82
K.	.70	.91	1.33
KA-KB-KC-KD.	.84	1.05	1.50



newest H&H HEGEMITE PLATE on the

SWITCH & RECEPTACLE COMBINATION No. 3974

Here's the new idea of doubled-up Convenience — with a "HEGEMITE" Plate which is newer still. Rich, lustrous brown with handsome border and vertical-ribbed surface. A real showpiece!

Receptacle opening is now *in* the plate. Takes the attachment plug of any electric appliance, while the Switch part controls the lights. To show it is to *sell* it — on your better jobs.

Double Pole, 10 Amps., 250 V.

No. 3974 - Composition Sw. Base - List \$1.45
No. 3975 - Porcelain Sw. Base - " 1.35

Carton: 1. Std. Pkg.: 10.

Double Pole, 20 Amps., 250 V.

No. 3976 - Composition Sw. Base - List \$1.55
No. 3977 - Porcelain Sw. Base - " 1.45

Carton: 1. Std. Pkg.: 10.

Single Pole, 10 Amps., 250 V.

No. 3978 - Porcelain Sw. Base - List \$1.35
No. 3979 - Composition Sw. Base - " 1.45

Carton: 1. Std. Pkg.: 10.

HART & HEGEMAN DIVISION
THE ARROW-HART & HEGEMAN ELECTRIC CO.
HARTFORD, CONN. MAKERS OF ELECTRIC SWITCHES SINCE 1890

To MARKET . . . To MARKET

EVERY hour . . . every day, thousands of people are going into stores just like yours and are buying batteries—most of these customers are asking for Eveready Dry Batteries, according to reports we receive from all over the country from jobbers, dealers and consumers themselves!

We do not say Eveready Dry Batteries sell themselves. We do say that you will make quicker sales and have more satisfied customers by selling Eveready Dry Batteries.

Eveready Dry Batteries give you a liberal profit for the first sale. They also insure steady, certain repeat sales—and repeat profits!

Order now from your jobber.

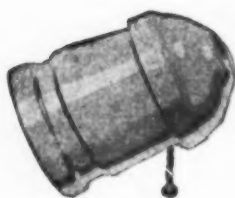
NATIONAL CARBON COMPANY, INC.
New York San Francisco
Atlanta Kansas City

Chicago
Unit of Union Carbide **UCC** and Carbon Corporation

POWER

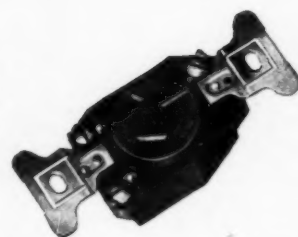


The time you



▲
The switch mechanism of the C-H Porcelain Socket is strong and positive. The construction throughout is rugged to withstand years of service. A single assembly screw saves time in wiring and interchange of caps and bases is possible. Made in the key, keyless, push-button and pull-chain types.
Approved by the Underwriters.

▲
C-H 3-wire Flush Receptacles are in keeping with the latest trend in wiring. The base is made of unbreakable, heat-proof Thermoplas—the clips of heavy phosphor bronze assuring positive contact and long life. The staked binding screws never loosen—and are large in size for strength and wiring convenience. C-H 3-wire Flush Receptacles meet Underwriters requirements.



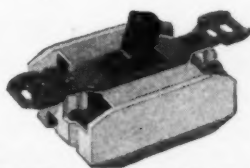
▼
• SELL • COMPLETE • CONVENIENCE •

spent to learn wiring ... Re-invest it!

Your experience can sell complete wiring for every home . . . and build your future prospects

YOUR knowledge of wiring represents an investment of your time and effort over a period of years. To make your experience fully valuable to you—it should be *re-invested* . . . to earn even greater profit.

Offer your assistance, your experience, to the builder, architect, owner and realtor. Help in checking over wiring plans. Few builders are wiring experts. They are apt to overlook the electrical improvements which will make the home more valuable—a better place to live—an easier place to sell. Your advice, based on your specialized experience will be gladly accepted.



C-H Flush Switches of the Toggle Type are constantly growing in popularity because of their beauty, convenience and quality. Built shallow—they are convenient to install in any standard box. Made in single-pole, double-pole and 3-way types. Approved by the Underwriters.

Returns on this investment of your experience are two-fold. Service of this kind builds good will—brings you to mind when the next job is up. Your suggestion for *complete wiring* will bring the maximum profit on the present job.

Good will thus earned deserves the protection of high quality wiring devices. The Cutler-Hammer Line provides a wiring device for every need—with the backing of over a quarter century of unquestioned reputation.

The Cutler-Hammer Catalog describes fully these quality wiring devices for every need. Write us for the catalog and stock up from your jobber.

CUTLER-HAMMER, Inc.

Pioneer Manufacturers of Electrical Apparatus

1258 St. Paul Avenue MILWAUKEE, WISCONSIN

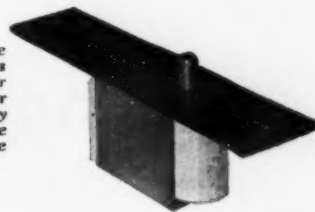
CUTLER HAMMER

MODERN WIRING  NECESSITIES



Because it doubles the number of outlets, at only a slight increase in cost, the C-H Duplex Receptacle is the simplest answer to the demand for more outlets. Large binding posts, shallow construction, make installation easy. Approved by the Underwriters.

C-H Automatic Door Switch can be installed in any door jamb. Light is turned on automatically when the door is opened. Especially convenient for lighting closets. Designed to fit in any type of box and to use any type of wire including "Romex." Approved by the Underwriters.



• • • • • BUILD • GOOD • WILL • • • • •

(3771)

INTRODUCING

Entirely New features in

TRIEX

NON METALLIC SHEATHED CABLE

There are now five layers of insulation covering the copper conductor, making this cable even sturdier than its predecessor.

Constant experiments by our engineers who are ever searching for the betterment of the industry, have resulted in this product. It is made entirely in our own factory from the bare copper wire, right up to the last tough outer cover, thus assuring you of the usual Triangle high quality.

ARMORED
CONDUCTORS
(round, flat, and leaded)
"TRIEX"
(non-metallic sheathed
cable)
NON-METALLIC
FLEXIBLE CONDUIT
RIGID STEEL CONDUIT

FLEXIBLE
STEEL CONDUIT
RUBBER-COVERED WIRE
RUBBER-COVERED
LEAD-ENCASED WIRE
TRIANGLE
ARMORED CABLE TOOL

1. Crimped ground wire
2. Copper conductor
3. Rubber insulation
4. Waxed paper insulation
5. Cotton braid
6. Heavy twisted paper
7. Jute filler
8. Heavy outer impregnated cover

"Making it Easier for the Contractor"

Triangle Conduit Co., Inc.

General Offices: Dry Harbor Road & Cooper Ave., Brooklyn, N. Y.

Factories

Brooklyn—Chicago—Butler, Pa.

In Canada

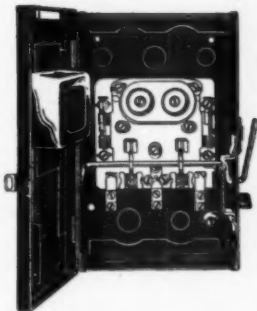
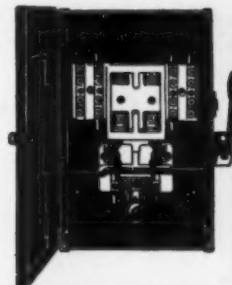
Triangle Conduit Co., Ltd., Toronto



WADSWORTH

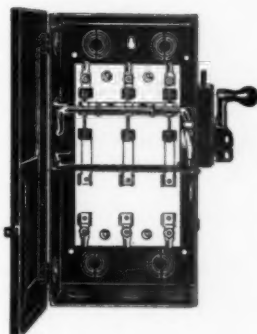
Plays Safe!

No. 1843
Accessible Fuse
60 Amp. Single Phase
Meter Test Type



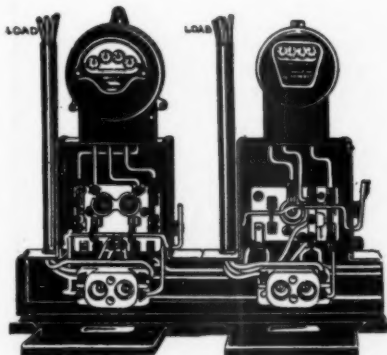
No. 1423

Showing Simplicity of Wiring Connections,
Ease of Inspection and Testing



No. 9583

New Quick Make-Quick Break
Industrial Switch of 60 Amp., 250 Volt
Note all Breaking Mechanism on
Outside of Cabinet



No. 372 and 362

Sealed Main Fuse Types
Branch Circuits in same Cabinet

TWENTY-TWO years ago, "Wadsworth" conceived and reduced to practice the first real accessible fuse 100% safety switch. The original thought has never been deviated from and it is now accepted as the Model Switch to follow.

This march of progress has been steady and away out in front, the leader, Wadsworth has played a prominent part in its continual development to perfection. Today, because of the modern machinery and production methods you can purchase the genuine high-grade Wadsworth Designed Safety Switches at no greater cost than other makes.

The Use of Wadsworth Switches

Insures Faster Work through Easier Wiring

Quicker Installation; a neat completed Appearance

Less Time on the Job—more Profit on the Books



Specify and demand Wadsworth Switches.

Result: Satisfied customers—more business for you.



QUALITY

Wadsworth Electric Safety Switches are designed by a practical electrician who knows your wiring problems and this means a positive help to you in your business.

SERVICE

95% of all orders are shipped within twenty-four hours after being received.

CO-OPERATION

There is probably a Wadsworth Distributor near you who can give you immediate delivery. Do not accept any substitute. If you cannot get Wadsworth switches from your Jobber, wire or write us and we will see that you get prompt service.

"There is a Wadsworth Switch for every installation."

Complete Catalogue mailed on request.

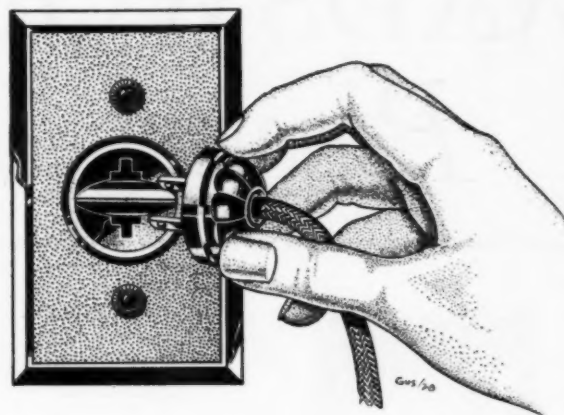
The WADSWORTH ELECTRIC MFG CO. INC.

Covington, Kentucky.

OUR MOTTO: Quality Goods—Prompt Service

Connects Quickly—Reliably

It's a Bryant Cap, a Bryant single receptacle with concave boss and finding rib, covered with a Bryant "Templus" plate.



Connects Quickly—Reliably

This Bryant brown "Templus" plate, No. OF51, aids materially in the sale and use of electrical appliances. It protects the user from any possible electric shock. "Templus" is a type of phenol resin composition having high dielectric properties and great mechanical strength. It is not affected by very high or low temperatures and will not burn. It retains its color, is odorless and will not warp or crack.



This brown composition single flush receptacle with side wiring terminals is really "convenient." The concave boss and "slot finder" enable "the man with the extension cord," to make rapid and easy connection. The prongs of the cap slip instantly into the slots regardless of the location of the receptacle.

The Bryant Cap is distinctive in appearance, easy to hold and lasting in service. The Bryant method of shaping and anchoring the prongs and plates for binding screws—each prong and terminal being formed in one piece, assures a durable cap. Staked No. 6 binding screws hold the wires of the extension cord firmly.

Bryant caps, receptacles and attachment plug bodies fit together accurately.

Cap No. KX has $\frac{1}{4}$ " x $\frac{3}{16}$ " cord hole, KT has $\frac{3}{8}$ " x $\frac{9}{32}$ ", and KY $\frac{9}{32}$ " round cord hole.



Our catalog, illustrating and describing over three thousand "Superior Wiring Devices," sent promptly on request.

THE BRYANT ELECTRIC COMPANY

BRIDGEPORT, CONNECTICUT, U. S. A.

New York

Philadelphia

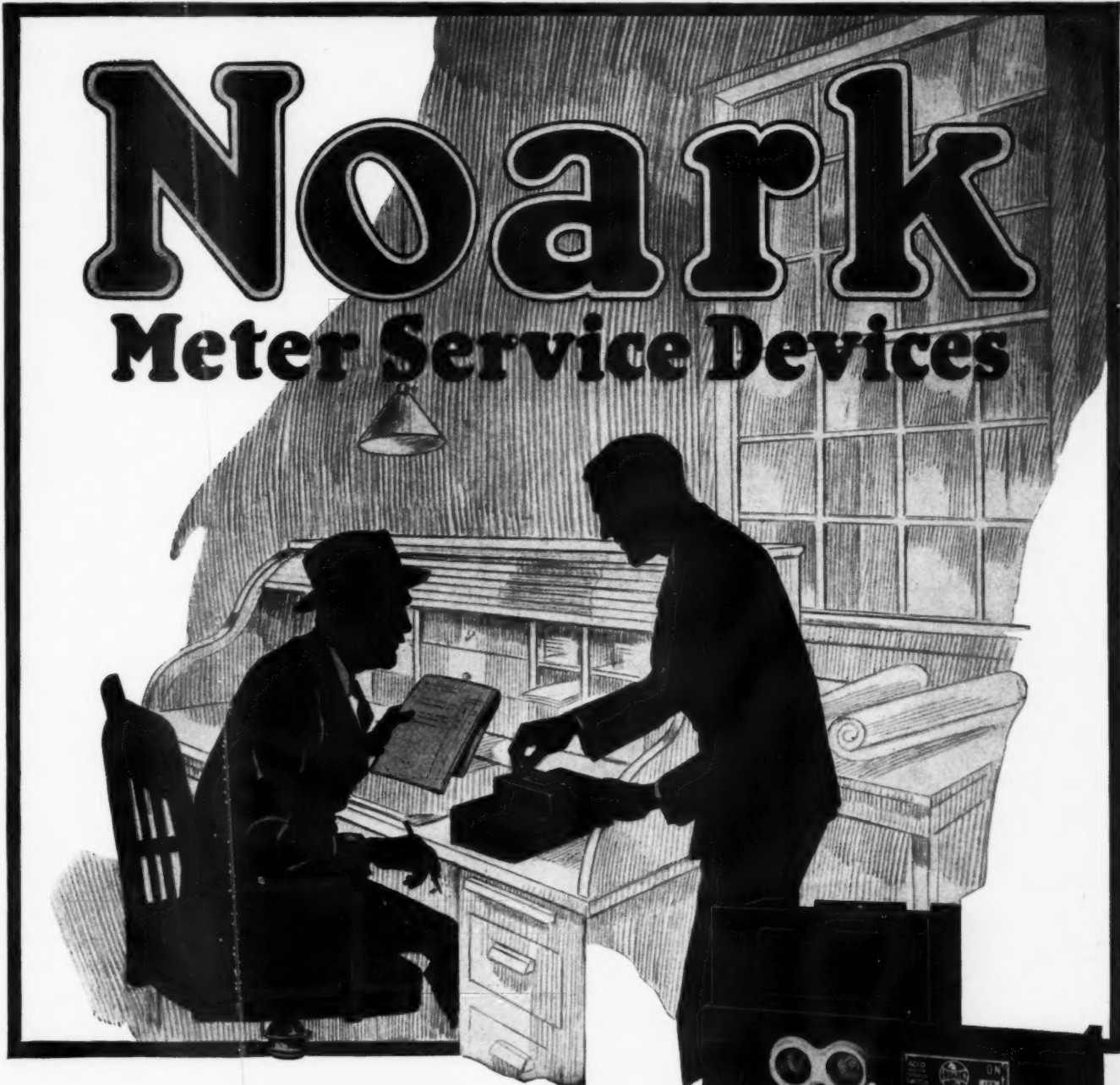
Chicago

San Francisco

Manufacturers of Superior Wiring Devices since 1888
Manufacturers of Hemco Products

Noark

Meter Service Devices



"Let's Use NOARK!"

THE Power Company calls for a switch which makes it easy and safe for its customers to renew blown fuses. The NOARK Switch does both.

"The only way to get at the fuses is to move the slide in the front of the cabinet a few inches. That's easy enough.

"But you can't do that until you have thrown the switch lever into the 'off' position. That makes it safe.

"Besides, they've got the cleanest knockouts and the handiest contacts—we'll have no trouble either installing or in wiring them."

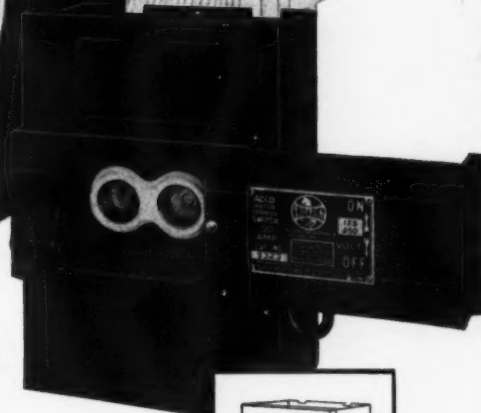
[CATALOG ON REQUEST]

COLT'S PATENT FIRE ARMS MFG. CO.

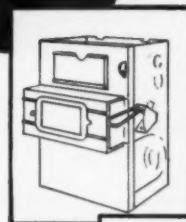
ELECTRICAL DIVISION

HARTFORD, CONNECTICUT, U. S. A.

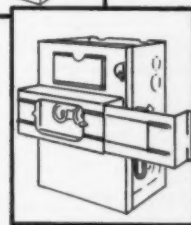
NEW YORK • BOSTON • PHILADELPHIA • CHICAGO • SAN FRANCISCO



Switch lever in
"on" position
prevents access
to fuses



Switch lever in "off"
position permits ac-
cess to fuses



Likewise, current
can't be switched
"on" until protect-
ing slide is closed

Lamp Receptacle S. H. Groove.....	\$.63
No S. H. Groove.....	.56
Fixture Rosette with Nipple.....	.56
Plug Receptacle 6 Amp.....	.70
20.....	.91
Cord Rosette.....	.49
Blank Cast Cover.....	.42

Prices are for Iron Fittings and include Guard and Globe

	1/2"	3/4"	1"
V-VA Complete as Above.....	\$5.85	\$5.92	\$6.00
VB-VC-VL Complete as Above.....	5.98	6.11	6.24
VCA-VLA-VT-VE-VS Complete as Above...	6.17	6.30	6.56
VTA-VX Complete as Above.....	6.30	6.56	6.76
VXA Complete as Above.....	6.57	6.83	7.03
VD-VK-VP Complete as Above.....	6.37	6.50	6.63
VF-VI Complete as Above.....	6.70	6.83	6.96

Prices are for Iron Fittings and include Guard and Globe	Form 200	1"
V-VA Complete as Above.....	\$7.02	\$7.16
VB-VC-VL Complete as Above.....	7.15	7.28
VCA-VLA-VT-VE-VS Complete as Above.....	7.28	7.50
VTA-VX Complete as Above.....	7.41	7.67
VXA Complete as Above.....	7.67	7.93
VF-VK-VP Complete as Above.....	7.48	7.60
VD-VI Complete as Above.....	7.67	7.80

	Form 75	Form 200
Guard with Half Metal Shade.	\$3.90	\$4.20
" " Gauge Metal Shade.	6.50	7.80
" " without Shade.	2.34	2.95
Globes only, clear.	1.12	1.12
" " opal.	1.54	2.38
" " green-blue & orange.	2.38	3.30
" " ruby.	3.30	4.06
Brass Reflector Holder Galv. Finish.	1.96	3.31
Threaded Blank Covers Iron Black Finish.	1.05	1.40
Sealing Plate Iron Galv. Finish.21	.35
Receptacle with Gasket & Screws.56	.56

(Page 89 Crouse Hinds Catalog No. 2000)

	Form 75		Form 200	
	Iron	Brass	Iron	Brass
Pendant or Bracket Type Complete...	\$7.93	\$11.18	\$8.80	\$12.42
Receptacle Only.....				.66

NOTE: Above numbers and figures are for Crouse Hinds' make or similar

STANDARD TYPES

"Kondur" "Appleton" or Similar

Types Without Covers	1 1/2"	1 3/4"	1"	1 1/4"
A.	\$.46	\$.62	\$.84	\$1.26
B.	.53	.70	.95	1.47
BE.	.95	1.23	1.79	2.74
C.	.74	.94	1.33	2.03
CB.	1.04	1.34	1.86	2.80
D.	.74	.94	1.29	2.03
E.	.53	.67	.94	1.48
LB-LF-LL-LR.	.81	.98	1.40	2.17
SE.	.81	1.09	1.71	2.66
T-TL-TR.	1.04	1.34	1.85	2.80
TB.	1.47	1.82	2.38	3.64
U & UB.	.91	1.12	1.64	2.52
X.	1.33	1.82	2.45	3.43
XB.	2.03	2.52	3.29	.....

Types	1½"	2"	2½"	3"
Without Covers	\$1.61	\$3.15	\$ 6.65	\$ 8.10
A.....	1.96	3.85	6.65	8.10
B.....	3.64	6.30	11.70	13.30
CE.....	2.66	5.11	8.55	11.15
CB.....	3.85	6.16	9.90	14.30
D.....	2.66	5.11	8.55	11.15
E.....	1.96	3.85	6.65	8.00
LB-LF-LL-LR.....	2.94	5.18	8.80	11.50
SE.....	3.99	7.00	11.85	14.85
T-TL-TR.....	3.85	6.16	9.90	14.40
TB.....	5.18	9.00	.....	.....
U & UB.....	3.29	6.00	10.10	13.20
X.....	4.48	8.33	12.35	19.15
XB.....	.....	.....	.....	.....

H Couplings.....	1/4"	3/8"	1"	1 1/2"
KO Box Connector.....	\$.32	\$.48	\$.83	\$ 1.11
NO.....	.20	.29	.67	1.34
SCA Cable Connector.....	.24	.31	.56	.84
SLP Short Elbow.....	.13	.17	.24
KOL Box Connector.....	.39	.52	.83	1.00
KOR Reducer.....	.43	.57	.98	1.54
	.58	.63
H Couplings.....	1 1/2"	2"	2 1/2"	3"
KO Box Connector.....	\$ 1.54	\$ 3.21	\$ 4.00	\$ 6.37
NO.....	1.18	2.49	3.28	4.30
SCA Cable Connector.....
SLP Short Elbow.....	1.23	2.66
KOL Box Connector.....	2.07	4.20
KOR Reducer.....

		1½"	¾"	1"	1½"
Blank Metal.....		\$.11	\$.15	\$.32	\$.45
Rubber Gasket.....		.14	.14	.21	.28
Metal, ¼ Nip.....		.28	.35	.49	.64
" ¼ ".....		.32	.39	.53	.69
" ½ ".....		.35	.42	.56	.71
" ¾ ".....		.42	.49	.63	.78
Porcelain with Holes.....		.14	.21	.35	.50
Metal, Cord Grip.....		.28	.35	.49
		1½"	2"	2½"	3"
Blank Metal.....		\$.63	\$.78	\$ 1.05	\$ 1.05
Rubber Gasket.....		.28	.56	.84	.84
Metal, ¼ Nip.....		.81
" ¼ ".....		.85
" ½ ".....		.88
" ¾ ".....		.95
Porcelain with Holes.....		.67	.84	1.12	1.12
Metal, Cord Grip.....	

Lamp Recept. without Shade Holder Groove PR...	16"	36"	1"
" " with Shade Holder Groove PRS...	\$.35	\$.42	\$.49
Porcelain for Weatherproof Socket WP2.....	.42	.49	.60
Polarity Plug Receptacle 10 Amp. P.....	.28
" " Duplex PD.....	.66	.63	.70
70	.78
	Sgle. Pole	Dble. Pole	3 Pole
Snap Switch 5 Amp. 125 Volt Non Indicating....	\$.70	\$1.26
" " 5 " 125 " Indicating.....	.77
" " 10 " 125 " Non-Indicating.....	1.12	\$1.47	1.47
" " 10 " 125 " Indicating.....	1.26	1.68

"Kondu" or Similar

Type	1 Gang			2 Gang		
	$\frac{1}{8}''$	$\frac{3}{16}''$	1"	$\frac{1}{8}''$	$\frac{3}{16}''$	1"
FSE-FSB.....	\$1.05	\$1.26	\$1.40	\$1.82	\$2.03	\$2.24
FSC-L & R.....	1.33	1.61	2.03	2.10	2.31	2.66
FST.....	1.75	2.31	2.73	.....	.....	.....
FSU.....	1.26	1.61	2.03	.....	.....	.....
FSD.....	1.75	2.31	2.73	2.38	2.73	3.08

Type	3 Gang			4 Gang		
	$\frac{1}{4}$ "	$\frac{3}{4}$ "	1"	$\frac{1}{4}$ "	$\frac{3}{4}$ "	1"
FSE-FSB.....		\$2.76	\$2.97		\$3.36	\$3.64
FSC-L & R.....		3.08	3.36		3.71	3.99
FST.....						
FSU.....						
FSD.....	\$3.22	3.57	3.85	\$4.27		

Covers for Above

	One Gang	2 Gang
Blank Metal Plate.....	\$.37	\$.70
Receptacle Plate.....	.28	.38
Toggle or Push Button Switch Plate.....	.38	

TYPE "O" FOR SNAP SWITCHES, ETC.

Type	5 Amp.		10 Amp.		
	$\frac{1}{2}''$	$\frac{3}{4}''$	$\frac{1}{2}''$	$\frac{3}{4}''$	1"
OA	\$.63	\$.64	\$.77	\$1.05	\$1.33
OC	.77	1.05	.91	1.26	1.68
OCB	1.19	1.54	1.33	1.75	2.24
OE	.56	.77	.70	.98	1.26
OEB	.91	1.12	1.05	1.33	1.75
OL	.91	1.12	1.05	1.33	1.75
OLB	1.19	1.54	1.33	1.75	2.24
OT	1.19	1.54	1.33	1.75	2.24
OTB	1.54	1.96	1.68	2.10	2.80
OU	.77	1.05	.91	1.26	1.68
OUE	1.19	1.54	1.33	1.75	2.24
OX	1.54	1.96	1.68	2.10	2.80
OXB	1.89	2.31	2.03	2.52	3.36

Type	1/4"	3/4"	1"
OA	\$1.05	\$1.19	\$1.61
OC	1.19	1.40	1.90
OCB	1.61	1.96	2.52
OE	.98	1.12	1.47
OEB	1.33	1.54	2.10
OL	1.33	1.54	2.10
OLB	1.61	1.96	2.52
OT	1.61	1.96	2.52
OTB	1.96	2.38	3.22
OU	1.12	1.47	1.90
OUE	1.61	1.96	2.52
OX	1.96	2.38	3.22
OXB	2.31	2.87	3.78

	5	10	20
	Amp.	Amp.	Amp.
Blank Metal Cover, Round.....	\$.21	\$.28	\$.35
Porcelain Cover, Round with holes.....	.21	.35	.49
Metal Cover with $\frac{1}{4}$ or $\frac{5}{8}$ Cord Grip.....	.35	.42	.49
Blank Metal Cover with $\frac{1}{4}$ male or female nipple.....	.35	.42	.49
" " " " $\frac{1}{4}$ " " " "	.42	.49	.56
" " " " $\frac{3}{8}$ " " " "	.49	.56	.63
" " " " $\frac{1}{2}$ " " " "	.56	.63	.70
Rubber Gaskets.....	.14	.14	.21
Lamp Receptacles Porcelain Edison Base.....	.42	.49	.56
" " Composition T Slot.....	.84

REDUCING BUSHINGS

Large End	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
Small End 1/2"	\$.41	\$.53	\$.71	\$.80	\$ 1.05	\$ 1.40
" " 3/4"		.60	.76	.90	1.19	1.50
" " 1"			.81	.94	1.29	1.60
" " 1 1/4"				1.13	1.43	1.90
" " 1 1/2"					1.51	1.90
" " 2"						2.27
" " 2 1/2"						3.26

FITTINGS, SPRAGULETS, WIRELETS
OR T & BBRANCH TYPE
Series 48

Description	G.E., Steel City or T & B Numbers	Price Each
Branch Body for 1/2" & 3/4" Rectangular Shape.	SP-48241	\$.27
Cover Metal Flat Closed.	SP-48C1	.11
" " " with 1/2" Knockout.	SP-48C6	.11
" " " Pendant Type with 1/2" Bushing.	SP-48C8	.12
" " " Pendant Type with 3/8" Bushing.	SP-48C11	.16
" " " with 1/2" Male or Female Nipple.	SP-48C22 & 23	.30
" " " with 3/8" Male or Female Nipple.	SP-48C24 & 25	.41
Cover Porcelain with one or two wire Holes.	SP-48C75 & 76	.14
" " " three or four wire Holes.	SP-48C77 & 78	.15
" " " 1/2" Male or Female Nipple.	SP-48C82 & 83	.29
" " " 3/8" Male or Female Nipple.	SP-48C84 & 85	.41

SHALLOW TYPE
Series 14

Description	G.E., Steel City or T & B Numbers	Price Each
Body Octagonal Shape for 1/2" or 3/4"	SP-14241	\$.35
Cover Metal Flat Closed.	SP-14C1	.11
" " " Raised with 1/2" Knockout.	SP-14C7	.11
Cover Metal Flat Pendant with 1/2" Bushing.	SP-14C8	.12
" " " with 1/2" or 3/4" Male or Female Nip.	SP-14C11	.16
" " " For all surface Mounted Devices	SP-14C22-23-24-25	.29
" " " Raised for Sign Receptacles.	SP-14C31-32-34-35-36	.12
" " " Flat for all Fluted Devices.	SP-14C39	.35
" " " Porcelain with one or two holes.	SP-14C75 & 76	.14
" " " Three or Four holes.	SP-14C77 & 78	.15
Cover Porcelain with 1/2" Male or Female Nipple.	SP-14C82 & 83	.29
" " " 3/8" Male or Female Nipple.	SP-14C84 & 85	.41
Raised Angle Adaptor for Device Covers.	SP-14C47	.26
" " " with Uno Shade Holder.	SP-14C67	.60

DEEP TYPE
Series 34

Description	G. E., Steel City or T & B Numbers	Price Each
Body Deep Octagonal Shape 1/2" & 3/4"	SP-34401	\$.47
Cover Metal Blank Flat.	SP-34R1	.14
Cover Metal For Flush Switches.	SP-34R2 & 3	.14
" " " Rotary Switches.	SP-34R4	.14
" " " Receptacles without Door.	SP-34R5	.14
" " " Receptacles with Door.	SP-34R6	.41
" " " Standard Dble. Plug Receptacle.	SP-34R7	.14
" " " Hubbell Dble. Plug Receptacle.	SP-34R8	.24
" " " Chapman Recept. with Doors.	SP-34R9	.60
" " " For GE 30 Amp. Polarized Plug Recep.	SP-34R13	.17
" " " GE Tumbler Switches.	SP-34R14	.14
" " " Hubbell and H&H Tumbler Switches.	SP-34R15 & 16	.19

COUPLINGS

SP-1410 Complete Coupling for 1/2" Conduit.	Price
SP-1420 " " 3/4" " "	\$.16
SP-1420 " " 1" " "	.24

FITTINGS, ENTRANCE

"ADAPTI"

Ent. Elle with Cov. Ser. 1100.	1/2"	3/4"	1"	1 1/4"
" Fitt. with Cov. Ser. 2703 to 30.	\$.50	\$.60	\$.65	\$ 1.35
Angle Ent. Fitt. with Cov. Ser. 27370 to 79.	.45	.55	.65	1.20
Signal Ent. Caps No. 2810-2811.	.50	.55	.65	1.20
Ent. Elle with Cov. Ser. 1100.	1 1/2"	2"	2 1/2"	3"
" Fitt. with Cov. Ser. 2703 to 30.	\$ 1.60	\$ 2.85	\$ 6.25	\$ 7.65
Angle Ent. Fitt. with Cov. Ser. 27370 to 79.	2.05	3.15	6.30	7.50
Signal Ent. Caps No. 2810-2811.	2.00	3.20	6.30	7.50

"UNILETS"

FEB Elbow with Cov. 1700 & 1900.	1/2"	3/4"	1"	1 1/4"
FB Elbow with Cov. 1713 to 16.	\$.50	\$.60	\$.70	\$ 1.70
FC End Fitt. with Cov. 1723-33-43.	.35	.50	.60	
AY Angle Fitt. 1950 to 54.	.20	.25	.30	
LAY End Fitt. with Cov. 1790 to 94.	.55	.60	.75	1.35
FEB Elbow with Cov. 1700 & 1900.	1 1/2"	2"	2 1/2"	3"
FB Elbow with Cov. 1713 to 16.	\$ 1.90	\$ 3.25	\$ 7.50	\$ 9.00
FC End Fitt. with Cov. 1723-33-43.				
AY Angle Fitt. 1950 to 54.	2.35			
LAY End Fitt. with Cov. 1790 to 94.	1.75			

"BEND HICKS"

Bend Hicks Galvanized.	1/2"	3/4"	1"	1 1/4"
Bend Hicks Galvanized.	\$.50	\$.60	\$.65	\$ 1.75
Bend Hicks Galvanized.	1 1/2"	2"	2 1/2"	3"
Bend Hicks Galvanized.	\$ 2.15	\$ 4.10	\$ 6.00	\$ 7.50

March, 1929

"CONDULETS"

Form 6

F Type Ent. Fitt. with Porc. Cov.	1/2"	3/4"	1"	1 1/4"
LB Type Ent. Fitt. with Metal Cov.	\$.40	\$.45	\$.60	\$.95
F Type Ent. Fitt. with Porc. Cov.	.45	.50	.60	1.15
LB Type Ent. Fitt. with Metal Cov.	1 1/2"	2"	2 1/2"	3"
F Type Ent. Fitt. with Porc. Cov.	\$ 1.60	\$ 2.85		
LB Type Ent. Fitt. with Metal Cov.	1.40	2.45		

"ELECTROLETS"

FB Angle Fitt. with Cov. 703-83.	1/2"	3/4"	1"	1 1/4"
KA End Fitt. with Cov. 1013 to 43.	\$.40	\$.50	\$.65	\$ 1.00
KB Elbow Fitt. with Cov. 1113 to 33.	.20	.20	.25	.30
SLB Elbow Fitt. with Cov. 1 to 4.	.30	.45	.55	
Y Capped Elbow Y1 to 5.	.50	.60	.70	1.75
FB Angle Fitt. with Cov. 703-83.	1 1/2"	2"	2 1/2"	3"
KA End Fitt. with Cov. 1013 to 43.	\$ 1.75	\$ 3.00	\$ 6.75	\$ 8.50
KB Elbow Fitt. with Cov. 1113 to 33.				
SLB Elbow Fitt. with Cov. 1 to 4.				
Y Capped Elbow Y1 to 5.	2.10			

G. E. See T & B below

GEE-VEE

F Service Cap Series 6000.	1/2"	3/4"	1"	1 1/4"
B " " 16000.	\$.45	\$.50	\$.70	\$ 1.00
F Pipe " " 1000-1310.	.45	.50	.70	1.00
B " " 2000 & 2100.	.40	.50	.70	.85
FB Universal " 3000.	.37	.45	.65	.75
Weathercap " 40122.	1.00	1.25	1.65	2.75
Service Elbow " 19000.	.60	.60		
A Terminal " 10000.	.40	.55	.65	1.90
Endo Terminal Series 90000.	.40	.45	.70	1.05
	.15	.20	.25	

F Service Cap Series 6000.	1 1/2"	2"	2 1/2"	3"
B " " 16000.	\$ 1.90	\$ 3.35	\$ 7.50	\$ 7.70
F Pipe " " 1000-1310.	1.90	3.35	7.50	7.70
B " " 2000 & 2100.	1.20	1.70	3.00	4.15
FB Universal " 3000.	1.05			
Weathercap " 40122.	3.75	5.40	9.50	12.70
Service Elbow " 19000.				
A Terminal " 10000.	1.40	2.40	4.55	7.40
Endo Terminal " 90000.				

"GEM POWERLETS"

MA Fittings with Porc. Cover.	1/2"	3/4"	1"	1 1/4"
MB " " " "	\$.25	\$.37	\$.45	\$.70
MF & MFF Fitting with Porc. Cover.	.35	.50		
MFB Fitting with Porc. Cover.	.47	.60	.70	1.75
MLB Fitting with Metal Cover.	.35	.50	.65	
MPA Fitting with Porc. Cover.	.52	.58	.85	1.35
MY " " " "	.15	.22		
MRA " " " "	.52	.62	.80	
	.50			

MA Fitting with Porc. Cover.	1 1/2"	2"	2 1/2"	3"
MB " " " "	\$.95	\$ 1.90	\$ 3.50	\$ 5.95
MF & MFF Fitting with Porc. Cover.	1.90	3.30	7.40	9.00
MFB Fitting with Porc. Cover.				
MLB Fitting with Metal Cover.	1.70			
MPA Fitting with Porc. Cover.				
MY " " " "				
MRA " " " "				

T & B

Ent. Cap 1525-32 with Cover.	1/2"	3/4"	1"	1 1/4"
Capped Elbow 1470-84 with Cover.	\$.45	\$.50	\$.65	\$ 1.00
Insulets 1610-11-12 with Cover.	.50	.60	.70	1.80
Angle Insulets 1640-1-2 with Cover.	.15	.20	.25	
Cable Insulets 2000 with Cover.	.35	.50	.60	
	.15			

Ent. Cap 1525-32 with Cover.	1 1/2"	2"	2 1/2"	3"
Capped Elbow 1470-84 with Cover.	\$ 1.75	\$ 3.00	\$ 6.80	\$ 8.50
Insulets 1610-11-12 with Cover.	2.10			
Angle Insulets 1640-1-2 with Cover.				
Cable Insulets 2000 with Cover.				

FITTINGS, "ADAPTI"

ROUND "ADAPTI" BOXES

Series Numbers	Style	1/2"	3/4"	1"
No. 02900.	1 Back Outlet	\$.40		
No. 2900-1-2-3.	" " "	.36	.45	.60
No. 3000 to 3005.	1 Side Outlet	.43	.50	.74
No. 3100 to 3105.	" " "	.40	.48	.60
No. 3100T & 3101T Thrdls.	" " "	.48	.55	
No. 31700 to 3175.	" " "	.47	.54	.67
No. 3200 to 3205.	2 " " "	.48	.54	.74
No. 3200T & 3201T Thrdls.	" " "	.60	.68	
No. 3270 to 3275.	" " "	.60	.67	.94
No. 32170 to 32175.	" " "	.54	.60	1.00
No. 3300 to 3305.	3 " " "	.64	.88	.98
No. 3300T to 3305T Thrdls.	" " "	.82	.95	
No. 33170 to 33175.	" " "	.71	.83	1.07
No. 3400 to 3405.	4 " " "	.80	1.05	1.20
No. 3500 to 3705.	2 " " "	.54	.60	.75
No. 3800 to 3805.	" " "	.54	.60	.80
No. 3900 to 4005.	3 " " "	.80	.93	1.08
No. 4800 to 5005.	4 " " "	.94	1.03	1.34

ROUND "ADAPTI" BOXES—Continued

Series Numbers	Style	1 1/4"	1 1/2"	2"
No. 02900	1 Back Outlet			
No. 2900-1-2-3		\$1.10		
No. 3000 to 3005	1 Side Outlet	1.80	\$2.00	\$2.75
No. 3100 to 3105		1.10	1.80	2.40
No. 3100T & 3101T Thrdls.	" " "			
No. 31700 to 3175	" " "	1.15	1.85	2.46
No. 3200 & 3205	2 " " "	1.25	2.13	2.75
No. 3200T & 3201T Thrdls.	" " "			
No. 3270 to 3275	" " "	1.40	2.28	2.88
No. 32170 to 32175	" " "	1.34	2.20	2.80
No. 3300 to 3305	3 " " "	1.96	2.68	3.00
No. 3300T to 3305T Thrdls.	" " "			
No. 33170 to 33175	" " "	1.70	2.75	3.10
No. 3400 to 3405	4 " " "	1.87	2.90	3.35
No. 3500 to 3705	2 " " "	1.40	2.28	3.35
No. 3800 to 3805	" " "	1.40	2.28	3.35
No. 3900 to 4005	3 " " "	1.85	2.90	4.00
No. 4800 to 5005	4 " " "	1.95	3.55	4.70

PARTS
For Above Boxes

Series No.	Description	1 1/4"	1 1/2"	2"
50J-501-502	Base Only	\$.27	\$.27	\$.54
500X-501X	Extension Ring	.27	.27	.40
501A	Base Concealed to Expd.	.67	.67	.67
0500	" with Tapped Boss	.84	.84	.84
510 to 512	Base	.40	.40	.80
520 to 522	"	.27	.27	.52
530	"	1.80	1.80	.52
540 to 542	"	.27	.27	.20
30 to 35	Metal Side Plates	.14	.14	.20
40 to 42	Insulated Side Plates	.16	.16	.34
50 to 54	Arm'd. Flex. Side Plates	.84	.43	.52
60 to 65	Angle Outlet	.15	.24	.43
70 to 75	Elbow Outlet	.24	.30	.50
90 to 93	Connecting Outlet	.28		.25
100 & 101	Straight for No. 500 Base	.15	.24	
110 to 113	" " No. 501 "	.28	.34	.43
120 to 125	" " No. 502 "	.47	.53	.67
130 to 135	" " No. 503 "	1.08	1.33	1.60
140 to 145	" " No. 504 "	2.67	3.08	3.48
300 & 301	Threadless Outlet	.20	.28	
310 & 311	"	.34	.40	

Series No.	Description	1 1/4"	1 1/2"	2"
500-501-502	Base Only	\$.54	\$ 1.08	\$ 1.08
500X-501X	Extension Ring	.40		
501A	Base Concealed to Expd.	.67		
0500	" with Tapped Boss			
510 to 512	Base	.80	1.60	1.60
520 to 522	"	.52	1.08	1.08
530	"	.62	1.08	1.08
540 to 542	"	.20	.38	.38
30 to 35	Metal Side Plates	.34	.67	.67
40 to 42	Insulated Side Plates	.67		
50 to 54	Arm'd. Flex. Side Plates	.48	.94	1.08
60 to 65	Angle Outlet	.55	1.00	1.14
70 to 75	Elbow Outlet		.30	.47
90 to 93	Connecting Outlet			
100 & 101	Straight for No. 500 Base	.48		
110 to 113	" " No. 501 "	.80	.94	1.07
120 to 125	" " No. 502 "	1.88	2.14	2.40
130 to 135	" " No. 503 "	3.87	4.28	4.67
140 to 145	" " No. 504 "			
300 & 301	Threadless Outlet			
310 & 311	"			

COVERS
For Round Adapti Boxes

Numbers	Description	Price
1	Porcelain One Hole Cover	\$.18
2	Metal For Devices	.30
3	Porcelain One Hole Cover	.30
4	Porcelain	.22
5 & 6	Porcelain with 1/2 Male or Female Nipple	.38
7 & 8	"	.53
9 & 10	Malleable with 1/2 Male or Female Nipple	.30
11 & 12	"	.38

NOTE: For "Adapti" Entrance Fittings See Page PL-13.

FITTINGS, "GROUNDULETS"

Style	Catalog Number	No. Wire	Conduit	Water Pipe	Price Each
GCA	GCA11	10 to 6	1 1/4"	1 1/4" to 1"	\$.80
"	GCA12	10 to 6	1 1/2"	1 1/2" to 2"	.85
"	GCA22	4 to 1	1 1/4"	1 1/4" to 2"	1.50
"	GCA32	0 to 000	1 1/4"	1 1/4" to 2"	2.30
GC	GC1	10 to 6	1 1/4"	1 1/4" to 2"	.95
"	GC2	4 to 1	1 1/4"	1 1/4" to 2"	1.70
"	GC3	0 to 000	1 1/4"	1 1/4" to 2"	2.70
GC For Open Wire	GC92		1 1/4"	1 1/4" to 2"	.75
"	GC922		1 1/4"	1 1/4" to 2"	1.50
GCL	GCL1	10 to 6	1 1/2"	1 1/2" to 2"	1.00
GCR	GCR1	10 to 6	1 1/2"	1 1/2" to 2"	1.00
GCE Strap Clamp	GCE12	10 to 6	1 1/2"	1 1/2" to 2"	1.60
GCE Plug Terminal	GCE142	10 to 6	1 1/2"	1 1/2" to 2"	.95
GCE	GCE242	10 to 6	1 1/2"	1 1/2" to 2"	1.05

GROUNDULET BRASS BUSHINGS

Size	1 1/4"	1 1/2"	2"	1 1/4"
Number	GC151	GC152	GC153	GC154
Price	\$.10	\$.12	\$.20	\$.23
Size	1 1/4"	2"	2 1/2"	3"
Number	GC155	GC156	GC1670	GC1680
Price	\$.30	\$.45	\$ 1.05	\$ 1.30

TERMINALS, JUMPERS, STUDS, SCREWS, ETC.

Strap Clamp Terminal with Bolt & Washer	No. GCE012	\$1.05
Plug	No. GCE042	.40
Flat Surface Terminal Less Bolt & Lug	No. GCE1	.40
"	No. GCE2	.55
Soldering Lug for GCE Conduit	No. GCE130	.20
Groundulet Meter Shunt	No. GC192	1.85
Jumper—8" Long	No. GC808	3.60
"—12" "	No. GC812	4.50
Double End Brass Stud	No. GC82	.18
Brass Cap Screw for Fastening Lugs 1/4" to 2"	No. GC5	.05
Brass Cap Screw for " 2 1/2" to 6"	No. GC6	.08
Copper Soldering Lug for 1/4" to 2" Bush	No. GC130	.05
" 2 1/2" to 6" "	No. GC160	.10
Soldering Clip for 1/4" to 2" "	No. GC131	.05
" 2 1/2" to 6" "	No. GC161	.10
Ground Strap—Per Foot	No. GC100	.25
"—Clamp—Each	No. GC101	.35
Groundulet Cable—Per Foot	No. GC800	.16

FITTINGS OR BOX CONNECTORS,
ARMORED CABLE

For BX or Armored Cable	Description	Size of K. O.	Price Each
Standard Squeeze Connector	1/4" to 1/2"	1 1/4"	\$.06
" Set Screw Connector	1/4" to 1/2"	1 1/4"	.06
" Slip In Connector	1/4" to 1/2"	1 1/4"	.06
" Duplex Connector	1/4" to 1/2"	1 1/4"	.18
STRAIGHT		1 1/4"	.18
BOX	Squeeze or Tangent Type	1 1/4"	.30
CONNECTORS		1 1/4"	.65
90 DEGREE ANGLE BOX CONNECTOR	Squeeze or Tangent Type	1 1/4"	1.25
45 DEGREE ANGLE BOX CONNECTOR	Squeeze or Tangent Type	1 1/4"	.32
PANEL BOX CONNECTOR	Straight Type With Locknut	1 1/4"	.48
COUPLINGS FOR FLEXIBLE STEEL CONDUIT	For 1/2" Conduit	1 1/4"	.38
COUPLINGS FOR RIGID TO FLEXIBLE CONDUIT	For 1/2" Conduit	1 1/4"	.44
Bushings or Ferrules—Brass		1 1/4"	.02

FITTINGS FOR "OVALFLEX" ARMORED CABLE

Number	Description	Price
2150-57-60-61	Straps—Fasteners & Bushings	\$.02
2159	Toggle with Wire Loop	.03
2176-2180-2154	Set Screw Connector	.15
2179-2181	Special Box Connector	.10
2155-2156	90 Degree Box Connector	.35
412-413	Connector for Ovalflex to Metal Molding	.35
9050-S	Squeeze Connector	.10

KNOBS, TUBES & CLEATS, PORCELAIN

KNOBS		Price Each	
Type	With Screw	With Nail	Without Screws
No. 5 1/2 Split Knobs	\$.02 1/2		\$.02
5 1/2 Solid Knobs	.03		.02 1/2
5 1/2 Nailit		\$.02 1/2	
5 1/2 Screwit	.04		
4 & 4 1/2 Knobs Solid	.05		.04
No. 9419 Split 1 1/2 x 1 1/2			.07
9420 Split 1 1/2 x 2 1/2			.12
22 Victor Split			.12
6061 Solid Teleph. 2 Groove			.10
6062			.12
103 & 107 Hemingway Break Knobs			.15

TUBES		Length	
Diam.	Price Each	3' & under	4' 5' 6' 8' 10' 12' 14' 16'
1/2"	\$.01	\$.01 1/2	\$.02 \$.02 1/2 \$.03 \$.04 \$.05 \$.06 \$.07 \$.08 \$.09 \$.10 \$.11 \$.12 \$.13 \$.14 \$.15 \$.16 \$.17 \$.18 \$.19 \$.20 \$.21 \$.22 \$.23 \$.24 \$.25 \$.26 \$.27 \$.28 \$.29 \$.30 \$.31 \$.32 \$.33 \$.34 \$.35 \$.36 \$.37 \$.38 \$.39 \$.40
3/4"	.01 1/2	.02	.02 1/2 .03 .04 .05 .06 .07 .08 .09 .10 .11 .12 .13 .14 .15 .16 .17 .18 .19 .20 .21 .22 .23 .24 .25 .26 .27 .28 .29 .30 .31 .32 .33 .34 .35 .36 .37 .38 .39 .40
1"	.02 1/2	.03	.04 .05 .06 .07 .08 .09 .10 .11 .12 .13 .14 .15 .16 .17 .18 .19 .20 .21 .22 .23 .24 .25 .26 .27 .28 .29 .30 .31 .32 .33 .34 .35 .36 .37 .38 .39 .40
1 1/4"	.04	.05	.06 .07 .08 .09 .10 .11 .12 .13 .14 .15 .16 .17 .18 .19 .20 .21 .22 .23 .24 .25 .26 .27 .28 .29 .30 .31 .32 .33 .34 .35 .36 .37 .38 .39 .40
1 1/2"	.06	.07	.08 .09 .10 .11 .12 .13 .14 .15 .16 .17 .18 .19 .20 .21 .22 .23 .24 .25 .26 .27 .28 .29 .30 .31 .32 .33 .34 .35 .36 .37 .38 .39 .40

2 & 3 Wire

ONE WIRE CLEATS
B & D Type—2 Piece

LOOM & L-SUNDRIES

SOLDERING LUGS

One Hole

For 2-Hole Lugs

CONDUIT LOCKNUTS

Size	Price
1 1/4	.01
1 1/2	.01 1/4
1 3/4	.02 1/4
2	.06
2 1/4	.10
2 1/2	.14
2 3/4	.24
3	.38
3 1/4	.50
4	.68

For Chain

MOLDING, NATIONAL

No. 022 & 222 Molding For Two Wires—Per Foot.....	\$.10
“ 033 & 044 “ “ Two to Four Wires—Per Foot.....	.11

No.	Description	Price Each	No.	Description	Price Each
200-201	Bushing.....	\$.01	334	Cross.....	\$.40
223	Clip.....	.02	335	Tee.....	.25
232	Coupling.....	.04	336	90 Deg. Elbow.....	.25
234	Cross.....	.43	337	90 Ext. Elbow.....	.25
235	Tee.....	.24	337B	Cap for Elbow.....	.10
236	90 Deg. Elbow.....	.20	338	90 Deg Int. Elbow.....	.12
237	45 " ".....	.20	338B	Cap for Int. Elbow.....	.12
238-9	90 " ".....	.20	339	Drop Cord Box.....	.37
245	Single Strap.....	.02	341	Junction Box.....	.40
255	Ground Clamp.....	.04	342	Surface Box.....	.40
278	Adaptor.....	.05	344	Base Coupling.....	.09
300	".....	.08	345	Single Strap.....	.05
301	Box Connector.....	.15	348	Cord Rosette.....	.35
303	Adaptor.....	.04	354	Double Strap.....	.05
315	Connector.....	.35	355	Ground Clamp.....	.08
316	90 Deg. Coupling.....	.30	356-7	Keyless Socket.....	.65
317	90 " Connector.....	.30	360	Conven. Outlet.....	.75
321A & B	Rawl Plug.....	.04	363	4 1/2" Plate.....	.35
323	Joint Cap.....	.02	363A	4 1/2" Cover.....	.24
332	Coupling & Supp.....	.05	363B	4 1/2" ".....	.28

[illegible]

3 Wire Per Foot \$.18

No.	Description	Price Each
401	Box Connector with $\frac{1}{4}$ " Locknut.....	\$.18
2133	Squeeze Type Coupling $1\frac{1}{4}$ " long.....	.18
2134	90 Degree Internal Elbow.....	.38
2135	45 " Flat.....	.27
2156	90 " Box Connector.....	.34
2159	Wire Toggle Fastener.....	.08
2161	Strap Fastener.....	.03
2181	Connector Ovalduct to Oval Knockout.....	.10
2662	Outlet Box 4 x $\frac{1}{2}$21
2663	Extension Ring for Boxes.....	.20
2665	Outlet Box 4 x $\frac{1}{2}$ with Fixture Stud.....	.28
2882	" " $3\frac{1}{4}$ x $\frac{1}{2}$20
2885	" " $3\frac{1}{4}$ x $\frac{1}{2}$ with Fixture Stud.....	.27
4170-S1	Sectional Switch Box 4 x $1\frac{1}{4}$ x 1.....	.38
4172-S1	Spacer for above box.....	.24

MOLDING, WIREMOLD

No. 500 2-Wire, price per ft.	\$.10
" 700 6-Wire, " " "12
Master Size, " " "25

	For No. 500 2 Wire Size	For No. 700 4 Wire Size	For Master Size
	No. Price	No. Price	No. Price
Coupling.....	501 .04	5701 .04	1001 .06
Bushing.....	502 .04	702 .04	1002 .06
Supporting Clip.....	503 .06	5703 .06	1003 .06
Strap.....	504 .04	704 .06	1005 .06
Connecting Cover.....	506 .04	706 .04	1006 .06
Ground Coupling or Clamp.....	509 .12	5709 .12	1009 .12
90 Degree Flat Elbow.....	511 .22	5711 .22	1011 .45
45 ".....	512 .22	5712 .22
Tee Plain.....	515 .36	5715 .36
Cross Plain.....	516 .37
Internal Elbow.....	517 .26	5717 .26	1017 .45
Elbow Pull Box.....	5717A .50
External Elbow.....	518 .22	5718 .22	1018 .40
Corner Box.....	519 .37	5719 .45
Narrow Fitting.....	5720 .55
Show Case Fitting.....	5720A .45
One Piece Rosette.....	521 .36	5721 .36
Two Piece Rosette and Block.....	522 .50
Fixture Rosette, 1 1/2".....	523 .70
3/4".....	524 .65	5724 .65
Receptacle Base.....	525 .70	5725 .70
Keyless Receptacle.....	526 .90	5726 .90
Attachment Plug.....	527 .90	5727 .95
Utility Box.....	5728-29 .36
Contact Block.....	30	5730 .30
Blank Cover.....	531 .14	5731 .14
Outlet Box, 2 1/2".....	532 .45	5732 .45
3".....	533 .45	5733 .45
Closed Extension Box.....	5734 .65
Distribution Box.....	5735 .70	1035 1.05
Blank Cover.....	536 .16	5736 .16
Extension Box, 1 1/2".....	537 .65	5737 .65
Fixture Box, 1 1/2".....	538 .65	5738 .65
2 1/2".....	5739 & A .65
Combination Box.....	5745 .70
Switch or Recep. Box, Single.....	5747 .80
" " " 2 Gang.....	5747-2 1.00
" " " 3 Gang.....	5747-3 1.15
Surface Box, Single.....	5748 .90
" " " 2 Gang.....	5748-2 1.20
" " " 3 Gang.....	5748-3 1.25
Push Switch Box.....	540 1.00	5749 1.00
" " " Shallow.....	550 1.05	5750 1.05
Adaptor Plate and Cover, Single.....	551 .70	5751 .70
" " " 2 Gang.....	552 1.25	5752 1.25
" " " 3 Gang.....	553 1.35	5753 1.35

I N A U G T Y P E A - 3 0



Type A-30 across-the-line motor starter for 20 H.P. at 550 and 440 volts; 15 H.P. at 220 volts; 7½ H.P. at 110 volts.

The Condit type A-30 motor starter is the first of a series of interrupting devices in which this new principle of arc prevention is applied, affording results heretofore unattainable with economy and maintenance. Orders will be received on or after March 4.

Write for information and prices.

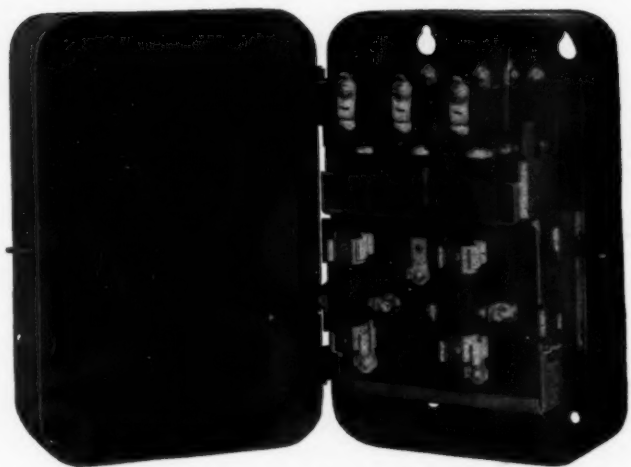
SPECIFICATIONS: 3 pole for across-the-line starting service with squirrel cage induction motors up to 20 H.P., 550 and 440 volts; 15 H.P., 220 volts; and 7½ H.P., 110 volts.

The Condit type A-30 motor starter inaugurates a new era in the design of circuit interrupting devices.

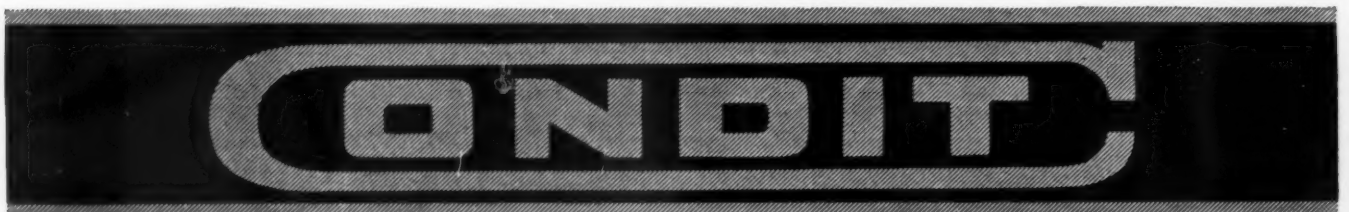
Hitherto, the arc with its accompanying effects of gas and contact burning has been assumed unavoidable in circuit interruption and efforts in the design of circuit interrupting devices have been directed to extinguishing this arc as speedily as possible only after it has formed.

In direct variance to this procedure the type A-30, based on the adage "An ounce of prevention is worth a pound of cure" operates to prevent the arc from forming, thereby eliminating the formation of gas and permitting relatively no contact burning on normal operation.

It is known that prevention of ionization when interrupting a circuit means prevention of arcing. The arc prevention principle of the type A-30 practically prevents ionization. Exhaustive tests show there is only a spark when interrupting currents six to seven times its normal rating and relatively no contact burning, no gas; indicating a minimum of maintenance.



Type A-30 with cover swung back, showing new precision type thermal overload relay.



U R A T E D

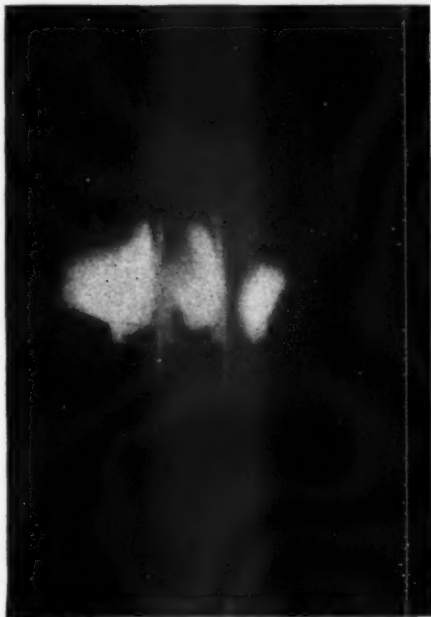
"Hardly an Arc—Only a Spark"

Results:

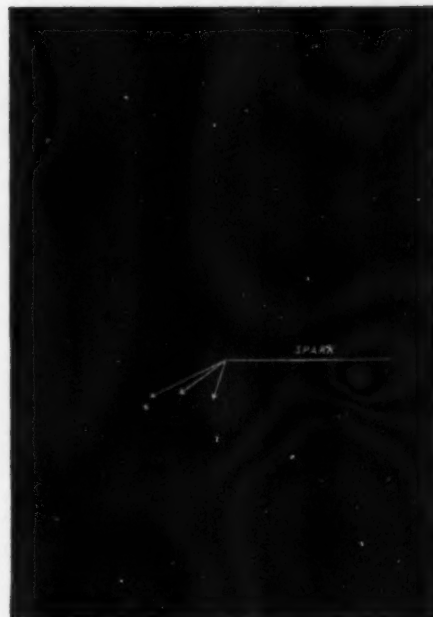
The type A-30 motor starter when tested with a 20 H.P., 440 volt, squirrel cage induction motor opened and closed the locked rotor current 437 times at 10 second intervals (when motor heating compelled the test to cease) without an arc at any interruption—only a spark, and with scarcely perceptible contact deterioration.

Fifty thousand operations at twice normal current on circuits of 55% power factor at maximum rated voltage caused less deterioration than a few such duty cycles on similar rated present devices.

There is hardly an arc,
—only a spark.



Unretouched photograph of arcing accompanying the interruption of the locked rotor current of a 15 H.P., 550 volt squirrel cage induction motor by a contactor type motor starter.



Unretouched photograph of the interruption by the type A-30 under precisely duplicate conditions as that of the old type starter opposite. Hardly an arc—only a spark.

Having no barriers or arc shutes, the type A-30 is unusually simple and compact. It is enclosed in a substantial, pressed steel case arranged for conduit knockouts. Furnished electrically operated with thermal relays for timelag overload protection and arranged for under-voltage protection.

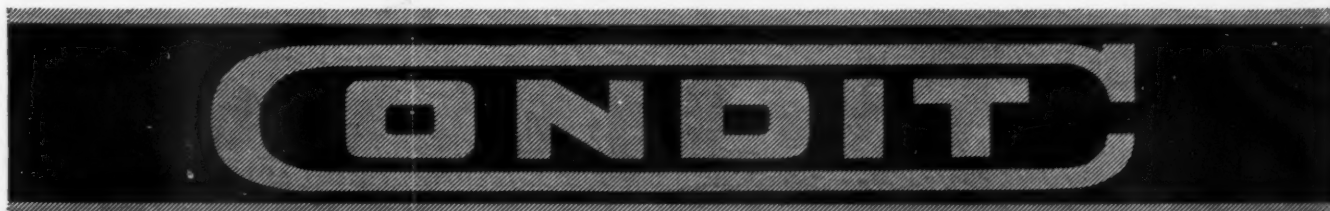
CONDIT ELECTRICAL MFG. CORPORATION

Manufacturers of Electrical Protective Devices
BOSTON, MASS.

Northern Electric Company
LIMITED

Distributor for the Dominion of Canada

2006



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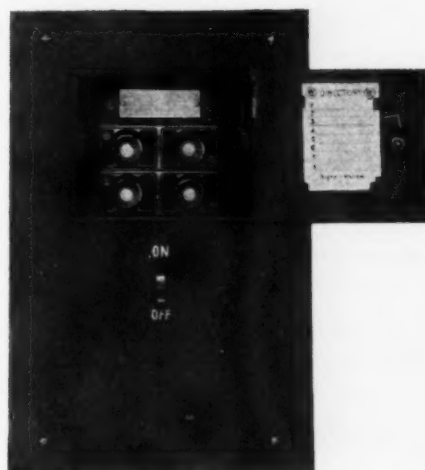
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YOU can wire to meet the future electrical needs of apartments, apartment hotels, stores or wherever 110-220-volt power may be used, by using the Westinghouse CLP panelboard.

This control cabinet which provides fusing facilities for both light and power circuits, as well as a 60-ampere tumbler switch for range control, enables you to feed the range, refrigerator, water heater, etc., through the one panelboard. The increasing use of electrical appliances makes it feasible to provide for apparatus that will probably be installed in the future. You can obtain a bigger wiring job and increase your profit by using the CLP.

The unit section construction, the adjustable corner iron and the rabbet return moulding—exclusive Westinghouse features that save installation time and expense are embodied in this panelboard. See the Westinghouse panelboard specialist before you estimate on your next job.



Westinghouse Electric & Manufacturing Company
Brooklyn Works Brooklyn, N. Y.

Sales Offices in all Principal Cities of
the United States and Foreign Countries

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Westinghouse

FITTINGS—Continued

	For No. 500	For No. 700	For No. 500
	2 Wire Size	4 Wire Size	Master Size
No.	Price	No.	Price
Box Connector.....	581	5781 & A	581
Conduit Coupling.....	582	5782 & A	582
Elbow Box Connector, 1/2" Male.....	583	5783	583
Elbow Box Connector, 1/2" Female.....	584	5784	584
Combination Connector.....	585	5785	585
Offset Connector.....	586	5786	586
Openwork Coupling.....	588	5788	588
Kick Plate.....	589	5789	589

N-SUNDRIES

PIPE NIPPLES

Galvanized Wrought Iron

		Size of Nipples and Price Each							
Length		Size 1	Size $\frac{1}{4}$ & $\frac{3}{8}$ "	Size $\frac{1}{2}$ "	Size $\frac{3}{4}$ "	Size 1"	Size $1\frac{1}{4}$ "	Size $1\frac{1}{2}$ "	Size 2"
Close Nipples...		\$.06	\$.06	\$.06	\$.07	\$.10	\$.14	\$.17	\$.20
2 $\frac{1}{2}$ " to 3 $\frac{1}{2}$ " Long		.10	.10	.10	.12	.15	.....	.....	.....
2 $\frac{1}{2}$ " to 4 $\frac{1}{2}$" "		.....	.....	.....	.....	.....	.....	.....	.....
3 $\frac{1}{2}$ " to 4 $\frac{1}{2}$" "		.....	.....	.....	.....	.....	.....	28	35
4 $\frac{1}{2}$ " Long.....		.11	.11	.10	.....	.....	.22	.....	.....
5 $\frac{1}{2}$" .....		.12	.12	.14	.14	.20	.24	.30	.38
6 $\frac{1}{2}$" .....		.14	.15	.15	.17	.22	.28	.34	.40
7 $\frac{1}{2}$" .....		.18	.18	.18	.21	.27	.34	.40	.55
8 $\frac{1}{2}$" .....		.20	.20	.21	.23	.30	.37	.45	.60
9 $\frac{1}{2}$" .....		.21	.21	.22	.25	.33	.40	.50	.67
10 $\frac{1}{2}$" .....		.23	.23	.24	.27	.37	.40	.56	.75

NOTE—Above prices are for ordinary galvanized pipe nipples as used by plumbers and steam fitters. If nipples have to be made up from conduit charge the foot price of conduit plus regular labor charge.

CHASE NIPPLES & COUPLINGS

Size	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
Chase Nipples...each	\$1.10	\$1.10	\$1.10	\$1.15	\$1.25	\$1.30	\$1.34	\$1.48	\$1.78	\$1.20
Couplings	.12	.12	.12	.14	.....	.....	.....	.....	.....	.....

For Erickson Couplings, see Page PL-8.

CHASE MALE REDUCERS

CHASE FEMALE ENLARGERS

[illegible]

NAILS

Insulated

Millonite Insulated Nails, per dozen.....	\$.05
Leather Nail Heads, " " .....	.05
Staples Insulated, " " .....	.05

PLUGS, ATTACHMENT

ATTACHMENT PLUGS COMPLETE

	Price
Competition Plug.....	\$.10
Pony Composition.....	.15
Standard " 1/2 Hole.....	.25
" " 3/4 ".....	.25
Bakelite " Black or Brown.....	.35
" " Green.....	.40
" " Fawn or Grey.....	.50
Double T Slot Parallel Porcelain.....	.45
" " Composition.....	.55
Paraline Convertible.....	.45
Steel Covered Cap & Standard Base.....	.30
Brass " ".....	.55
Cord Grip " ".....	.40
" " Steel Covered Cap & Standard Base.....	.45
Polarized Standard Plug complete.....	.30
" " Heavy Duty Plug with Brass Cap.....	1.25
" " 3 Wire Heavy Duty Plug with Composition Cap.....	.90
One Piece Attachment Plug Composition.....	.35
" " Benjamin 903.....	.20

CAPS ONLY

For Attachment Plugs

Parallel Pony Cap	Composition.....	\$.10
Standard	Cap Composition.....	.10
	Metal Covered Composition.....	.20
	with Cord Grip.....	.30
	Met. Cov. Composition.....	.50
	Knostrain Composition.....	.40
	Brass Covered.....	.90
	Bakelite Black or Brown.....	.15
Polarized Standard	.....	.15
	Brass Covered.....	.40
Tandem Blades Standard	.....	.25
	Steel Covered.....	.50
	with Cord Grip.....	.30
	Steel Covered with Cord Grip.....	.50
	Knostrain Composition.....	.55
	Brass Covered Composition.....	.95

Reynolite Han-D-Cap No. 470—\$.30 No. 480—\$.35.
Note for other caps see Page PL-17.

BODIES ONLY

For Attachment Plugs

Pony Composition Body only	\$.10
Standard .....	.15
Bakelite " Black or Brown .....	.20
" Red-Green-Orange .....	.25
Heavy Duty Polarized Porcelain .....	.45
3 Wire .....	.50

Flasher Plugs

Diamond Flasher Button.....	\$.60
Speeddoodle Flasher Plug 60 Watts—\$1.50. 100 Watts.....	2.00

PLUGS, APPLIANCE

Make	Number & Description	Price Each
American Beauty	803 Plug Complete for Small Irons	\$.50
	806 " " " " Large Irons	1.35
	807 " " " " Toaster & Stoves	.25
Arrow	6510 " " " " with Switch	.85
Beaver	See Gripall & Suitzall.	
Bryant	668 Plug Complete with Switch	.85
	752 " " " " Shorter than 668	.65
Cutler-Hammer	7051 Plug Complete with Switch	.85
Dover	13 Up Connector Plug for 3 1/4 & 6 lb. Irons	.50
	13 Switch Plug Complete	1.00
Fitsall (Rodale)	P-21 Competitive Plug, no Switch	.20
Gripall (Beaver)	F1 Super Type Adjustable Contacts	.45
	F4 Nickel Alloy	.55
	F5 " " Armored Casing	.55
	F6 " " " " Nick. Alloy Contacts	.60
	G1 Gripall Switch Plug with Switch	.90
	G21 " " Competitive Type with Switch	.45
Hemco	250 Heater Plug, no Switch	.55
Hotpoint	CD6P1 Iron Plug	.45
	CD69P1 " " Armored	.60
	CD79P1 " " with Switch	1.00
Hubbell	7020 Appliance Switch Plug	.90
Kool-Pull (Colts)	Appliance Plug, no Switch	.75
	" " " " with Switch	1.00
Liberty	932 Heater Plug	.35
Plugall	9 Appliance Plug with Spring	.30
	700 " " " " Switch	.85
Propp	5—One 4 All Appliance Plug, no Switch	.35
	55 Standard Iron Plug, no Switch	.25
	56 Armored	.55
	55 Iron Plug with Switch	.55
P & S	550 Appliance Switch or Pendant	.55
Reynolite	500 Reynolite Connector Plug, with Switch	.50
	510 " " " " " " with Switch	.50
Rodale	P-67 Quality Iron Plug, no Switch	.25
	P-23 Armored	.40
	P-29 " " " " Bronze Contacts	.30
	P-15 Iron Plug with Switch	.60
	800 Armored Plug with Toggle Switch	.90
Security	151 Security Appliance Plug, no Switch	.40
Simplex	890 Armored Appliance Plug, no Switch	1.00
Suitzall (Beaver)	F2 Heater Plug Contact Clips	.25
	F22 " " " " Regular Binding Screws	.25
Sunbeam	Heater Plug	1.50
Torrid	503 & 505 Appliance Plug, Variable Heat Con.	2.00
Utillo	1500 Utillo Appliance Plug, no Switch	.20
Westinghouse	299423 Plug Complete, no Switch	.75
	373656 " " " " with Switch	1.00
White Cross	White Cross Heater Plug, no Switch	.50
	" " " " " " with Switch	.90

PANEL BOARDS

BULLDOG FUSINTERS

Small Residence Type

No.	Description	2	4	6	8	12
		Circt.	Circt.	Circt.	Circt.	Circt.
BF	Flush Type—Luminized.....	\$2.50	\$3.75	\$5.40	\$8.80	\$11.80
BBF	—Black.....	2.00	2.80	4.75	.....	.....
BBS	Surface Type—Black with Embossed Fronts.....	2.00	2.75	4.75	8.30	12.05
CBS	" " —Black—Flat Cover with Inside Shield.....	1.85	2.35	3.90	7.15	10.40
BOS	" " —Black—Flat Cover with- out Shield.....	1.70	2.15	3.75	.....	.....
BSF	Flush Type—Luminized with Toggle Switch Plate.....	.....	6.65	10.00	15.00	20.00
BSF	" " —With 30 Amp. Safto Fuse.....	.....	20.60	22.00	.....	.....
BSF	" " —With 60 Amp. Safto Fuse.....	.....	21.75	22.45	.....	.....
BKF	" " —Fusenter & Pull Box.....	.....	6.65	10.00	15.00	20.00
COMBINATION	—“Safto Fuse” Switch & Cutout—30 Amp. or 60 Amp. Size. Flush Type—\$7.50. Surface Type—\$6.50.	.....	.....	.....	.....	.....
All Other Types—	For Resale Prices on all other Bulldog Fusenters use Manu- facturers' list prices, less 17%.	.....	.....	.....	.....	.....

TRUMBULL—CIRCLE T

Residence Panel Boards

Number	Description	4	6	8	10	12
		Circ.	Circ.	Circ.	Circ.	Circ.
3104	Single Fusing 2 Wire Mains, 3					
3212	Wire Branches.....	\$2.85	\$ 4.60	\$ 9.75	\$11.30	\$13.00
3404	Double Fusing 2 Wire Mains, 3					
3412	Wire Branches.....	9.15	12.45	18.25	23.25	26.80

TRUMBULL-VANDERPOEL

	2	3	4	6	8	12
Black or Aluminum Flush.....	\$1.80	.....	\$2.70	\$4.90	\$8.55	\$13.05

Panel Boards

Receptacles, Porcelain

WESTINGHOUSE

Junior Residence Type

Number of Circuits	2	3	4	6	10	12
Gray Trim & Galv. Box						
Flush No. 64012 to 64021	\$1.75	\$2.25	\$2.50	\$4.50	\$6.60	\$7.85
Gray Trim & Galv. Box						
Surface No. 64052 to 64061	1.75	2.25	2.50	4.50	6.60	7.85
Toggle Sw. Flush Type						
No. 64034 to 64042		6.60	10.00	13.20	16.50	19.80

P-SUNDRIES

RUNNING THREAD, PIPE

Price per Foot	$\frac{1}{8}$ "	$\frac{1}{4}$ "	$\frac{3}{8}$ "	$\frac{1}{2}$ "
	\$.25	\$.30	\$.35	\$.45

SOLDERING PASTE

(Also on Page PL-25.)

Make	2 Oz. Cans	2 Oz. Tubes	4 Oz. Cans	Half Pound Cans	One Pound Cans
Allen	\$.30	\$.40	\$.55	\$.90	\$1.45
Burnley	.20		.30	.40	.70
Crescent	.25		.35	.55	.85
G. E.	.20			.75	1.30
Highland	.30				1.40
Nokorode	.20			.75	1.30

PAINT & VARNISH

Insulating

Make	Per Pint	Per Quart	Per Half Gallon	Per Gallon
Armaltac	\$.55	\$1.00	\$1.75	\$3.00
Ajax Varnish No. 25	.40	.75	1.35	2.20
Enamelac	.40	.75	1.35	2.20
C. P. Black or Clear	.45	.80	1.45	2.60
Lustorac	.40	.75	1.35	2.20
Voltoac Quick Drying	.40	.75	1.35	2.20
W. P. Black Insulating	.40	.75	1.35	2.20
P. & B. No. 2 Paint	.55	1.00	1.75	3.00
Pothead Compound, per Pound				\$.55

For Pipe Straps, see Page PL-25. For Solder, Sticks, etc., Page PL-25.

PLATES & PLUGS, RECEPTACLE

PLATES

For Flush Receptacles

	Brass	.040 Thick Sprayed B. Brass	.060 Thick Sprayed B. Brass
Stand. Recep. Plate Single or Duplex	\$.15	\$.20	\$.30
" Lift. Cover Pl. Single or Duplex		.40	.45
" Lift. Cov. 2 Gang Single or Duplex		.65	.75
Disappearing Door Plate Single			.70
Duplex			1.10

SUNDRY PLATES

For Receptacles

Brass Combination Plate-1 Switch-1 Recep. or Duplex .040 Brass	\$.60
" " " " " " .060	.75
" " " " " " .060	1.00
Bakelite or Composition Plate Single or Duplex Each	.20
2 Gang Combination Plate Each	.40
Guth Porcelain Plate for Single or Duplex Receptacle	.30
Mirror Glass Single Plate \$2.00—Duplex \$3.00—3 Gang	4.00
Bryant Wood Inlaid One Gang for Single or Duplex Receptacle	2.25
De Luxe All Metal	.85
Hubbell Bakelite Screwless Plate	.50
Brass Single Plate for 10 & 20 Amp. Recep. #5548	.30
30 Amp. Receptacle 7072 & 7114	1.35

CAPS OR PLUGS

For Receptacles

Standard Types	Price
Pony Parallel Blades Composition	\$.10
Standard	.10
Standard Bakelite Parallel Blades Composition	.20
Tandem	.25

SPECIAL PLUGS & CAPS, BRASS COVERED—CORD GRIP ETC.

Disappearing Door Plug Composition	\$.65
Brass Covered	1.00
Parallel Blades Brass Covered	.40
Cord Grip Composition	.30
" Steel Covered	.50
" Knostrein Composition	.40
Brass Covered	.90
Polarized Blades Standard Composition	.15
Brass Covered	.40
Cord Grip	.50
20 Amp.	.90
" Composition	.50
10 " 3 Wire	.45
20 " " Brass Covered	1.00
30 " 2 " Black Porc.	1.75
Tandem Blades Std. Composition	.25
Brass Covered	.40
Cord Grip Brass Covered	.50
" Knostrein Composition	.55
Brass Covered	.95

March, 1929

RECEPTACLES, FLUSH

STANDARD RECEPTACLES OR CONVENIENCE OUTLETS

	Without Plates	Plates Extra	Price
Shallow Comp. Side Wired Single			\$.25
" " " Duplex			.35
" Porc. " Single			.25
" " " Duplex			.35
Deep Comp. Top			.45
" " " Single			.65
" Porc. " Duplex			.45
" " " Single			.65

SUNDRY RECEPTACLES

Plates Extra Except Where Marked "X"

For Lift Cover Plate Single	\$.50
" Duplex	.80
x With Rd. Mt. Cvr. For 3 1/4" Box Single	.50
" " " " " Duplex	.40
" " " " " 4" Single	.55
" " " " " " Duplex	1.15
x With Rd. Brass Plate Small Single	1.25
" Large	.25
Edison Screw Base Recep. Single	.25
Disappearing Door Recep. Single	.75
Duplex	1.10
Screwless Plate Recep. Single	.30
Duplex	.45
10 Amp. Polariz. For 2 Wire Single	.65
20 " " " " " " " "	1.30
30 " " " " " " " "	2.75
10 " " " " " " " "	1.45
20 " " " " " " " "	1.60
30 " " " " " " " "	4.35

RECEPTACLE COMBINATIONS

With Plates

Bryant Numbers or Equal

2957-2979 One Flush Recep. One Tumb. Switch Tempus or Brass Plate	\$2.00
2967-2989 One Comp. Recep. One Tumb. Switch Tempus or Brass Plate	2.10
117 Porc. Flush Recep. One Ind. Switch-.060 Brass Plate	2.20
121 " " " " " " " " One Pilot light .060 Brass Plate	2.50
514 " Disap. Door Rec. One Bulls Eye Solid Plate	4.60
518 " " " " " " " " Flush Switch-Bulls Eye Solid Pl.	7.35
467 " Flush Recep. One Flush Switch Bulls Eye Solid Plate	6.75
763 Duplex Flush Recep. Bulls Eye Solid Plate	3.75
558 " Push Switch Bulls Eye Solid Plate	6.30
427 Bulls Eye Receptacle & Lamp no plate	1.25
Hubbell Switch Tap Combination #7163 & 7164 without Plate	2.15

RECEPTACLES, PORCELAIN

PULL TYPE FOR FIXTURES

Keyless & Pull Chain for Lighting

Univ. No.	G. E. No.	Type	Price
994	2288	8' Insulated Chain and 6 Feet Cord	\$.70
995	2292	8' Chain	.60
996	2289	6 Feet of Cord	.60
997	2293	8 Inches of Insulated Chain	.60
998	2287	Short Chain—6 Feet of Cord	.60
999		3 Feet of Chain	.75

ALL WHITE PORCELAIN RECEPTACLES

For Ceilings or Walls

No.	(Arrow—Hubbell or P & S or Similar)	Price
860	For 3 1/4" & 4" Box with Shade Hldr. Groove	\$1.00
851	" " " " " " " " 2 1/4" Shade Holder	1.40
1351	" " " " " " " " 3 1/4" " "	1.70
1451	" " " " " " " " 4" " "	1.75
951	" " " " " " " " Porc. Ring No S. H.	1.10
960	" " " " " " " " Box only with 2 1/4" Shade Holder	1.25
921	" " " " " " " " with Porc. Ring No S. Holder	1.00
871	" B. X. Box with 2 1/4" Shade Holder	1.55
1371	" " " " " " " " 3 1/4" " "	1.85
1471	" " " " " " " " 4" " "	1.75
971	" " " " " " " " Porc. Ring-No S. Holder	1.25
829	For 3 1/4" or 4" Box with Shade Hldr. Groove	1.95
849	" " " " " " " " 2 1/4" Shade Holder	2.40
1349	" " " " " " " " 3 1/4" " "	2.60
1449	" " " " " " " " 4" " "	2.65
949	" " " " " " " " Porc. Ring No S. Holder	2.05
929	" 3 1/4" Box only with 2 1/4" Shade Holder	2.20
919	" " " " " " " " Porc. Ring No S. Holder	1.90
869	" B. X. Box with 2 1/4" Shade Holder	2.55
1369	" " " " " " " " 3 1/4" " "	2.85
1469	" " " " " " " " 4" " "	2.65
969	" " " " " " " " Porc. Ring No S. Holder	2.55
830	For 3 1/4" & 4" Box with Shade Hldr. Groove	1.95
850	" " " " " " " " 2 1/4" Shade Holder	2.40
1350	" " " " " " " " 3 1/4" " "	2.65
1450	" " " " " " " " 4" " "	2.70
950	" " " " " " " " Porc. Ring-No S. Holder	2.05
930	" 3 1/4" Box only with 2 1/4" Shade Holder	2.15
920	" " " " " " " " Porc. Ring-No S. Holder	1.90
870	" B. X. Box with 2 1/4" Shade Holder	2.55
1370	" " " " " " " " 3 1/4" " "	2.85
1470	" " " " " " " " 4" " "	2.85
970	" " " " " " " " Porc. Ring-No S. Holder	2.15

75

RECEPTACLES, SURFACE

SURFACE RECEPTACLES—STANDARD

Edison Base		Universal Number	Price
Description	All Keyless No S. H. Groove		
Pony Cleat Receptacle Side Screws		50715	\$.15
Round Center		9171	.20
Standard Cleat	Side	9402	.30
	With	4013	.40
Oblong		58300	.55
Concealed	Round Base	4001	.55
	With Removable Ring	50744	.55
Oblong Receptacle for Wood Molding with S. H. Groove		4026	.65
Mogul P & S. 520—Arrow 5012 or Hubbell 3464			.85
Miniature or Candelabra Small Type		9445-6	.20
Extended		386-7	.25

T-SLOT SURFACE RECEPTACLES

Without Caps

	Price
Small T Slot Concealed Recep. 10 Amp.	\$.50
T Cleat	.50
For Wood Molding	.50
Metal	.55
Conduit Fittings	.55
Outlet Box	.50
With Covered Terminal	.60
Polarized Cleat 10 Amp.	.60
Concealed	.60
Wood Molding	.65
3 Wire With Cap.	1.15
Cleat No Cap.	.75
Concealed No Cap.	.75
Wood Molding No Cap	.80
3 Wire Conc. With Cap	2.00
All Porcelain for 3 1/4" Box Single	.45
" " " " Duplex	.55
" " " " Single	.60
" " " " Duplex	.70

BOX & SIGN RECEPTACLES

Edison Base

	Price
Shallow Sign Recep. Screw Term.	\$.30
" " Concealed Term.	.35
" " 6 Concealed Wire Term.	.40
" " with S. H. Groove	.35
Deep " " Screw Term.	.30
" " Concealed Term.	.30
" " 6 Concealed Wire Term.	.40
One Piece " " Screw Term.	.20
Recept. With Plate for 3 1/4" Box	.25
" " " " 4" Box	.30
" " " " 3 1/4" Weathpf.	.30
" " " " 4" Box	.35
All Porcelain for 3 1/4" Box	.40
" " " " 4" Box	.50
Brass Covered for 3 1/4" & 4" Box	1.00
" " Pull for 3 1/4" & 4" Box	2.00

R-SUNDRIES

STANDARD ROSETTES

Porcelain

	Price
Cleat—1 Piece Junior Fuseless Rosette	\$.15
" " " " Fusible	.20
Concealed—2 Piece Concealed Fuseless Rosette	.35
" " " " Fusible	.20
" " " " For Wood Moulding—Fuseless	.35
" " " " Fusible	.20
Box Type—1 Piece Rosette for 3 1/4" Box—Fuseless	.40
" " " " " " Fusible	.50
" " " " " " Brass Covered for Boxes	1.20

For Special Conduit Rosettes—See Pages PL-10, 11 and 12.

GROUND RODS

Galvanized, not Copperweld

Size	Not Wired Price	Wired Price
3/4"x5 Feet Each	\$.35	
3/4"x6 " "	.40	
3/4"x5 " "	.55	\$.70
3/4"x6 " "	.60	.75
3/4"x7 " "	.70	
3/4"x6 " "	.85	1.00
3/4"x7 " "	1.00	
3/4"x8 " "	1.15	
1"x8 " "	2.70	3.20

RAWLPLUGS

Standard Types

Number of Rawlplug	Drill Hole	For Screw No.	Price Each Any Length
#6	3/16"	6-7	\$.02
8	3/16"	8-9	.03
10	3/16"	10-11	.04
12	3/16"	12	.05
14	3/16"	14	.06
16	3/16"	16-18	.08
20	3/16"	20-22	.12

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Rawlplugs for Lag Screws

Size of Lag Screw	Size Drill Hole	Size of Rawlplug	Price Each Length	1 1/2"	2"	2 1/2"	3"	3 1/2"
3/8"	7/16"	3/8"	\$.13	\$.15	\$.18	\$.20	...	...
1/2"	5/8"	1/2"	.14	.17	.20	.23	...	...
5/8"	3/4"	5/8"	.20	.23	.26	.28	...	...
3/4"	7/8"	3/4"	...	...	.27	.30	\$.30	...

NOTE: For Expansion Shields—See Page PL-10.

SOCKETS

STANDARD SOCKETS

Complete Sockets		with				Caps Only				Body Only
	Pendnt	1/2"	3/4"	1"	1 1/2"	Pendnt	1/2"	3/4"	1"	1 1/2"
Brass Shell Standard Key...	Cap	Cap	Cap	Cap	Cap	Cap	Cap	Cap	Cap	Cap
" " " Keyless...	.25	.25	.35	.45	...	...	...	...	...	...
" " " Pull...	.40	.40	.50	.60	...	...	...	...	...	...
" " " Push...	.30	.30	.40	.50	...	...	...	...	...	...
Electrolier Same as Above...	...	...	...	...	...	...	...	...	...	...
Lock Type (Brass) Key...	1.00	1.00	1.10	1.20	.10	.10	.20	.30	.95	
" " " Keyless...	.95	.95	1.05	1.15	...	...	...	...	.90	
" " " Pull...	1.15	1.15	1.25	1.35	...	...	...	...	1.05	
" " " Push...	1.00	1.00	1.10	1.20	...	...	...	...	.95	
Porcelain Key...	.55	.65	.70	.90	.15	.30	.35	.50	.40	
" " " Keyless...	.50	.60	.65	.85	...	...	...	...	.35	
" " " Pull...	1.00	1.15	1.20	1.40	...	...	...	...	.90	
" " " Push...	.75	.80	.95	1.10	...	...	...	...	.60	
Levolier Pull Socket...	.40	.40	.50	.60	...	...	...	...	...

BASES FOR SOCKETS

For Brass Shell Sockets

	Price
Small Concealed Base	\$.35
" " Brass Covered Base	.50
3 1/4" Box Base Brass Covered	.70
" " " " " "	1.00
Cleat Base for Open Wiring	.40
Wood Molding Base	.35
Angle Base	.40

For All Porcelain Sockets

	Price
All Porcelain Cleat Base	\$.25
" " " Concealed Base	.30
" " " For Wood Molding	.30
" " " 3 1/4" Box Base	.45
" " " " " "	.60

BAYONET SOCKETS

Sometimes Called Wall Sockets or Receptacles

Keyless Brass Shell with Small Conc. or Slotted Base	50717 & 18	\$.40
" " " " " " Covered Base	60019	.65
" " " " " " Large	60020	.90
Key " " " Small Concealed Base	9184	.65
" " " " " " Covered	60018	.65
" " " " " " with Removable Ring	50747	.65

WEATHERPROOF SOCKETS

Standard Weatherproof Pigtail molded or Porcelain	\$.25
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CANDLE SOCKETS

Any Make

Keyless Candle Socket with Tube & Solid Open or Adjust. Hickey	\$.25
Tumbler Type Candle Socket with Tube & Solid Open or Adjust. Hickey	.50
Pull Chain Candle Socket with Tube & Solid Open or Adjust. Hickey	.65

CANDELABRA OR MINIATURE SOCKETS

	Price
Keyless Porcelain with Male Thread	\$.35
" " " " Female	.35
" " Brass Shell 1/2" Cap	.55
Key " " " " 3/8"	.65
Pull " " " " 1/2"	1.35

DIM-A-LITE & LO-LITE SOCKETS

Dim-a-lite #23	\$1.00
" " " " 33	1.25
" " " " 34	1.25
" " " " 91	1.50
Lo-Lite	1.00

SOCKET ACCESSORIES

Adaptors for Sockets—See Pages PL-4 and 18	
Acorn Hubbell 5919-6982-7004—or Similar—Each	\$.10
Acorn Luminous Hubbell 7015 Bryant 750 GE 860—or Similar—Each	.30
Bushings Hard Rubber 1/4" Each .01c—3/4" Each	.02
Chain for Pull Sockets—Per Foot	.10
Cord for Devices—Light Type—Per Foot	.02
Cord for Devices—Heavy Type—Per Foot	.04
Handles for Sockets—Bryant 1240-1388—or Similar	.25
Splicing Links Non-Insulating for Chain—Each	.05
Splicing Links Insulated for Chain—Each	.15

ELECTRICAL CONTRACTING

SOCKETS, HEAVY DUTY

MOGUL SOCKETS

Arrow—Bryant—G. E.—Hubbell—H. & H. and P. & S.

	Without Yoke or Cap	With $\frac{3}{8}$ or $\frac{1}{2}$ Iron Yoke	With $\frac{3}{8}$ or $\frac{1}{2}$ Alum. Cap
Porcelain One Piece Socket.....	\$.65	\$.80	\$.95
" Two " " " " " "	.80	.95	1.10
" One " with Lead Wires.....	.80	.95	1.10
Brass Shell Mogul Socket $\frac{3}{8}$ or $\frac{1}{2}$ Brass Cap.....			\$2.90
" " " " & $\frac{3}{4}$ Shadeholder.....			3.35
" " " " & Box $\frac{1}{2}$ & 95° Box.....			3.35
" " " " with Porc. Base & Shadeholder Boxes.....			3.35

HEAVY DUTY WEATHERPROOF SOCKETS

Copper or Aluminum		Price
2	Piece Keyless $\frac{3}{8}$ or $\frac{1}{2}$ Cap.	.75
2	" " " " with Cord Grip.	.75
1	" " " " $\frac{3}{8}$ or $\frac{1}{2}$ Cap.	.65
1	" " " " with Cord Grip.	.65
1	" " Pull $\frac{3}{8}$ or $\frac{1}{2}$ Cap.	1.45
1	" " " " With Cord Grip.	1.45
Shadeholders for above sockets.		
2	$\frac{3}{4}$ Aluminum or Copper Extra.	.35
3	" " " " "	.50
4	" " " " "	.65

HEAVY DUTY & REFLECTOR SOCKETS

		Price Each
Benco Keyless Socket with Clamp Ring	#4700 to 4703	\$1.25
" " " " " "	" " " " " "	1.10
" Pull	4712 to 4715	2.00
" " " " " "	4706 to 4709	.80
Benco Keyless Socket	Copper or Alum. #4200-1-4-5 & 4335 & 7	.90
" " " " " "	Brass #4202-4203-4336	1.55
" Pull	4207-8 4225-26 4236-37	2.25
" Mogul	Copper Shell #4210-4297	
Benco Threaded Holders Only		4"
Polish. Alum. Weatherprf	#4215 & 4217	\$.30 \$.55
Copper	" 4370-72 & 73	.35 .55
Brushed Brass	" 4377-79 & 80	.35 .55
Reflector Sockets Porcelain	3/8-1/2 or 3/4	
Keyless with X Type Fitting	4605-9-51-50 & 65	\$1.20
Self Lock Socket with X Fitting	4528-29-32-33	1.70
Shock Absorbing Socket with X Fitting	4676-77-78-80-81	1.60
" " " " " "	Self Locking with Fitting 4548-9-50-52 & 53	2.00

SWITCHES, FLUSH TUMBLER

Plates & Boxes Extra

	Price
Square Handle Porcelain Cup—Sgl. Pole.....	\$.35
" " " Dble.....	1.00
" " " 3 Point.....	.50
" " " 4.....	1.50
Composition Cup—Sgl. Pole.....	.85
" " " Dble.....	1.35
" " " 3 Point.....	1.00
" " " 4.....	1.75
Round Handle Porcelain Cup—Sgl.....	.35
" " " Dble.....	1.00
" " " 3 Point.....	.50
" " " 4.....	1.50
Composition Cup—Sgle.....	1.10
" " " Dble.....	1.40
" " " 3 Point.....	1.30
" " " 4.....	1.90
New 2 Circuit Type Duple-Twin-Duplex, etc. 2.....	1.15
" " " Triple-Triple-Tripex 3.....	1.45
" " " Single & 3-Way Type.....	1.35
Lock Type Porcelain Cup—Sgl. Pole.....	1.30
" " " Dble.....	1.80
" " " 3 Point.....	1.50
" " " 4.....	2.25
EXTRAS—For Luminous Tip add for Each Handle.....	\$.40
" " " For Glo Guide Handle Switches add for Each.....	1.00

TUMBLER SWITCH COMBINATIONS

With Plates

Bryant 2957-2979	One Tumb. Sw.—One	Flush Recep. Brass or Temp. P.	\$2.00
2959	"	Pilot Light .060 Plate	3.00
H & H 8887	"	Bulls Eye .060	3.25
8809	"	Recept. Bulls Eye Solid	5.30
8805	"	Duplex	5.60
Hubbell 7163 & 7164	Switch Tap Combination	No Plate	2.15

PLATES

For Tumbler Switches

	1	2	3	4
	Gang	Gang	Gang	Gang
Stamped Brass Sprayed Finish .040 Thick.....	\$.15	\$.30	\$.45	\$1.55
" Brush Brass .040 ".....	.20	.40	.60	1.55
" Sprayed .060 ".....	.20	.40	.60	1.70
" Brush Brass .060 ".....	.30	.60	.90	1.85
Bakelite or Composition Molded.....	.20	.40	.60	.80
Twin & Triple Struck Up Plates.....		.30	.30	
Solid Brass.....		.60	.50	
Hubbell Bakelite Screwless Plates.....	.60	1.10	1.55	
Bryant DeLuxe Wood Inlaid any Finish.....	2.25	3.90	6.25	
All Metal.....	.85	1.50	2.00	
Guth Porcelain Enamel Plates.....	.30	.60	.90	
Glass Mirror Plates.....	1.00	1.75	2.50	3.25
Combination Switch & Receptacle Plate Molded.....			.40	.40
Brass .040 thick.....				.50

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SWITCHES, FLUSH PUSH

Plate & Boxes Extra

	Price
Standard Shallow Type Porcelain Cup—Single Pole.....	\$.35
" " " " Double.....	1.15
" " " " 3 Point.....	.60
" " " " 4.....	1.60
Deep Type Porcelain Cup—Single Pole.....	.70
" " " " Double.....	1.15
" " " " 3 Point.....	1.15
" " " " 4.....	1.60
Special Composition Cup—Single Pole.....	1.15
" " " " Double.....	1.50
" " " " 3 Point.....	1.50
" " " " 4.....	1.60
Lock Type Porcelain Cup—Single Pole.....	1.45
" " " " Double.....	1.85
" " " " 3 Point.....	1.85
" " " " 4.....	2.35
Electroliter Non-Indicating.....	1.75
Indicating.....	1.90
Extra for Luminous Button Add Per Switch.....	.40

PUSH SWITCH COMBINATIONS

With Plates

Bryant	117	D. P. Indicat.	Switch	Flush Receptacle & .060 Plate.....	\$2.00
	413	One Push Switch-Bulls Eye and Solid Plate.....			4.25
	518	"	Disap. Door Recp.	Bulls Eye-Solid Plate.....	7.35
	465	"	D. P. Flush Switch & Pilot Lamp .060 Plate.....		3.50
	467	"	Flush Switch-Flush Recept.-Bulls Eye-Solid Plate.....		5.75
	558	"	"	Duplex.....	6.30
H & H	3752	"	"	Bulls Eye-Solid Plate.....	4.25
	3759	"	"	Duplex Recep. Solid Plate.....	5.50
	8810	"	"	" Single.....	5.30

PLATES

For Flush Push Switches

Description	Price			
	1 Gang	2 Gang	3 Gang	4 Gang
Stamped Brass Sprayed Finish .040 Thick.....	\$.15	\$.30	\$.45	\$1.35
" " Brush Brass .040 ".....	.20	.40	.60	1.55
" " Sprayed .060 ".....	.20	.40	.60	1.70
" " Brush Brass .060 ".....	.30	.60	.90	1.85
Bakelite or Composition.....	.20	.40	.60	.80
Hubbell Bakelite Screwless.....	.60	1.10	1.55	...
Bryant DeLuxe Plates Wood Inlaid.....	2.25	3.90	6.25	...
All Metal.....	.85	1.50	2.00	...
Guth Porcelain Plates.....	.30	.60	.90	...
Glass Mirror Plates.....	1.00	1.75	2.50	3.25
Combination Push & Receptacle Plates .060 Brass.....	...	...	...	.60
" " " " " Molded.....	...	...	...	.40
" " " " " Guth Enameled.....	...	...	...	.60
" " " " " Mirror Glass.....	...	...	...	1.75

SWITCHES, SURFACE SNAP

METAL COVERED SNAP SWITCHES

Poles Single	Volts	Type	Size	5 Amp.	10 Amp.	20 Amp.	30 Amp.
"	125	Non-Indicating.....	Pony	\$.35	....	....	....
"	"	Indicating.....	"	.40	....	....	....
"	"	Non-Indicating.....	Standard	.55	\$.75	\$1.45	\$2.10
"	"	Indicating.....	"	.65	1.00	2.00	2.85
Double	250	Non-Indicating.....	"	.90	1.10	2.20	2.55
"	"	Indicating.....	"	1.05	1.15	2.40	2.70
Triple	"	Non-Indicating.....	"	....	2.80	3.60	4.35
"	"	Indicating.....	"	....	3.00	3.75	4.50
3-Way	125	Non-Indicating.....	"	.90	1.25	2.25	2.70
4-Way	250	Non-Indicating.....	"	1.30	2.85	6.00	....
Electroliner	"	Non-Indicat. 110V.....	"	1.35	1.35	2.10	....
"	"	Indicating 110V.....	"	1.50	1.50	2.25	....

ALL PORCELAIN SNAP SWITCHES

Poles	Volts	Type	Size	5 Amp.	10 Amp.	20 Amp.	30 Amp.
Single	125	Non-Indicating.....	Pony	\$.30	..	..	..
"	125	Indicating.....	"	.55	..	..	..
"	125	Non-Indicating.....	Standard	.65	\$.85	\$1.60	\$2.40
"	125	Indicating.....	"	.70	.95	1.75	2.55
Double	250	Non-Indicating.....	"	.95	1.20	2.45	2.85
"	250	Indicating.....	"	1.10	1.35	2.60	3.00
3-Way	125	Non-Indicating.....	"	.95	1.35	2.60	3.00
4-Way	125	Non-Indicating.....	"	1.50	3.00	..	..
Electroliter		.....		1.55	1.55	..	..
		Indicating.....		1.70	1.70	..	..

TUMBLER OR TOGGLE SNAP SWITCHES

Metal

	Metal Single Pole	Double Pole	3 Point	4 Point
125-250 Volt				
5 Amp. Closed or Slott. Base.....	\$.35	\$.85	\$.80	.....
10	.80	1.10	1.25	\$1.40

SNAP SWITCHES FOR WOOD MOLD, CONDULETS, ETC.

	Metal Covered		All Porcelain	
	5 Amp. 125 Volts	Indicating	Non-Indicating	Indicating
Single Pole.....	\$.65	.....	\$.75	\$.70
Double ".....	1.10	.....	1.20	1.15
Three Point.....	1.10	.....	1.20	.....
Electroliner.....	1.40	.....	1.40	.....

Switches

"Square D" Without End Walls Live & Dead Fuse Type

Number	Amps.	Pole	Fused	Neutral	Description	Price
55211	30	2	1 Plug	Solid	Single Type Fuse Dead.....	\$ 2.20
58211	30	2	2	Fused	" " " Live.....	2.70
SK-916	30	2	1	Unfused	" " " ".....	2.70
55311	30	3	2	Solid	" " " Dead.....	3.45
57311	30	3	2	"	" " " Live.....	3.45
15211	30	2	1	"	Gang Type Fuse Dead.....	2.60
18211	30	2	2	Fused	" " " Live.....	3.10
15311	30	3	2	Solid	" " " Dead.....	3.85
17311	30	3	2	"	" " " Live.....	3.85
					Extra for End Wall.....	.30
58251	30	2	2 Cart.	Fused	Cartridge Fuse Live.....	3.05
26251	30	2	2	"	" " " Dead.....	3.75
57351	30	3	2	Solid	" " " Live.....	3.75
28252	60	2	2	Fused	" " " ".....	8.45
27312	60	3	2	Solid	" " " ".....	8.90
14312	60	3	2	"	" " " Dead.....	19.80
28253	100	2	2	Fused	" " " Live.....	15.05
27313	100	3	2	Solid	" " " ".....	15.95
14313	100	3	2	"	" " " Dead.....	27.35

SK-671	30	3	3	Cart.	Fused	Cartridge Type	Fuse	Dead...	4.30
SK-660	60	3	2	"	Unfused	"	"	" ...	11.75
SK-672	60	3	3	"	Fused	"	"	" ...	11.75
SK-674	100	3	2	"	Unfused	"	"	" ...	19.20
SK-673	100	3	3	"	Fused	"	"	" ...	19.20

End Walls for 30 Amp. Switches.....	\$.30
" " " 60 & 100 Amp. Switches.....	.80
Trough Closing Plates No. 20533 & 34.....	10
Connecting Trough No. 20733—3½" Long.....	45
" " " 20738—8½".....	.80
Universal End Wall & Shutters.....	.30
" " " Meter Shutter only No. 24358.....	.15

"Square D" Single Throw, Industrial Switches Quick Break Only

250 Volts Fusible				250V. DC & 500V. AC Fused & Unfused			
Amps.	2 Pole	3 Pole		Amps.	2 Pole	3 Pole	
60	#46252 \$ 8.10	#46352 \$ 9.90		30	500 Volt Fused	#46341	\$ 8.55
60	Solid Neutral	#47312 9.00		60	#41242 \$ 8.10	#41342	8.55
100	#46253 12.60	#46353 15.30		60	500 Volt Fused	#46342	10.80
100	Solid Neutral	#47313 14.40		100	#41243 \$10.80	#41343	12.15
200	#46254 19.80	#46354 26.10		100	500 Volt Fused	#46343	17.10
200	Solid Neutral	#47314 22.50		200	#41244 \$18.90	#41344	22.50
				200	500 Volt Fused	#46344	32.40

"Square D", Industrial Quick Make & Break, Single Throw

250 Volts Fusible				250-500 & 600 Volts Unfusible			
Amps.	2 Pole	3 Pole		Amps.	2 Pole	3 Pole	
30	#80251 \$10.80	#80351 \$12.60		x30	#81251 \$ 9.45	#81351 \$11.25	
60	#86252 13.50	#86352 17.00		60	#81242 11.70	#81342 14.40	
100	#86253 20.70	#86353 27.00		100	#81243 19.80	#81343 21.60	
200	#86254 32.40	#86354 36.00		200	#81244 25.20	#81344 30.60	

(x=250 Volts only).

"Square D", Industrial, Single Throw

30 Amp. Only-250 Volts		
91251	Not Quick Break 2 Pole Not Fused.....	\$2.65
91351	" " " 3 " " "	4.00
x90251	Quick Break 2 Pole Fused.....	7.65
x90351	" " " 3 " " "	9.90
(x-60 Amp. Switches with 30 Amp. Spacing Clips)		

"Square D", Quick Make & Break, Single Throw

Numbers & Types	Amps.	Volts	2 Pole	3 Pole	4 Pole
76251-351-451 Cover Control.....	30	250 V.	\$15.30	\$16.20	\$22.50
76352-76452	60	250 V.	.....	22.50	31.50
76341-76441 " "	30	500-600 V. ....	.....	22.50	31.50
76342.....	60	500-600.....	.....	32.40.....	
69251-351-451 without Cover Cont.	30	250 V.	13.50	14.40	20.70
69352-69452 " "	60	250 V.	.....	20.70	29.70
69351-69441 " "	30	500-600 V. ....	.....	14.40	29.70
69342.....	60	500-600 V. ....	.....	30.60.....	
75251-351 Time Protective.....	30	250 V.	6.30	6.75	.....
75341 & SK2054 Time Protective ...	30	500-600 V. ....	.....	11.70	13.50
6351 Cast Iron Box.....	30	250 V.	.....	18.00.....	

Square D

250 Volts—3 Pole			500 Volts A. C.—3 Pole		
Numbers	Amps.	Price	Numbers	Amps.	Price
77351-78351	30	\$17.30	78341	30	\$18.25
77352-78352	60	17.30	78342	60	19.15
77353-78353	100	28.50	78343	100	29.75
77354-78354	200	47.50	78344	200	50.50

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Trumbull-Vanderpoel Single Throw Industrial Type

250 Volts DC or AC Fusible				500-600 Volts AC Fusible			
Amps	2 Pole		3 Pole	Amps	2 Pole		3 Pole
30 A	#4321	\$ 3.00	#4331 \$ 4.35	30 A	#4325	\$ 9.00	#4355 \$ 8.55
60 A	#4322	\$ 3.15	#4332 \$ 5.15	60 A	#4326	\$ 9.60	#4356 \$ 9.50
100 A	#4323	\$ 3.30	#4333 \$ 5.30	100 A	#4327	\$ 10.20	#4357 \$ 10.10
160 A	#4324	\$ 3.45	#4334 \$ 5.45	160 A	#4328	\$ 10.80	#4358 \$ 10.70
200 A	#4325	\$ 3.60	#4335 \$ 5.60	200 A	#4329	\$ 11.40	#4359 \$ 11.30
250 A	#4326	\$ 3.75	#4336 \$ 5.75	250 A	#4330	\$ 12.00	#4360 \$ 11.90
400 A	#4327	\$ 3.90	#4337 \$ 5.90	400 A	#4331	\$ 12.60	#4361 \$ 12.50
600 A	#4328	\$ 4.05	#4338 \$ 6.05	600 A	#4332	\$ 13.20	#4362 \$ 13.10
800 A	#4329	\$ 4.20	#4339 \$ 6.20	800 A	#4333	\$ 13.80	#4363 \$ 13.70
1000 A	#4330	\$ 4.35	#4340 \$ 6.35	1000 A	#4334	\$ 14.40	#4364 \$ 14.30
125-250 Volts—Solid Neutral				250 DC or 500-600 AC Unfused			
Amps	3 Pole		4 Pole	Amps	2 Pole		3 Pole
30 A	#04332	\$ 6.70	#04342 \$ 8.10	30 A	#14322	\$ 3.15	#14332 \$ 4.05
60 A	#04333	\$ 7.00	#04343 \$ 8.40	60 A	#14323	\$ 3.30	#14333 \$ 4.20
100 A	#04334	\$ 7.30	#04344 \$ 8.70	100 A	#14324	\$ 3.45	#14334 \$ 4.35
160 A	#04335	\$ 7.60	#04345 \$ 9.00	160 A	#14325	\$ 3.60	#14335 \$ 4.50
200 A	#04336	\$ 7.90	#04346 \$ 9.30	200 A	#14326	\$ 3.75	#14336 \$ 4.65
250 A	#04337	\$ 8.20	#04347 \$ 9.60	250 A	#14327	\$ 3.90	#14337 \$ 4.80
400 A	#04338	\$ 8.50	#04348 \$ 9.90	400 A	#14328	\$ 4.05	#14338 \$ 4.95
600 A	#04339	\$ 8.80	#04349 \$ 10.20	600 A	#14329	\$ 4.20	#14339 \$ 5.10
800 A	#04340	\$ 9.10	#04350 \$ 10.50	800 A	#14330	\$ 4.35	#14340 \$ 5.25
1000 A	#04341	\$ 9.40	#04351 \$ 10.80	1000 A	#14331	\$ 4.50	#14341 \$ 5.40

Trumbull-Vanderpoel

Numbers	Amps.	Volts	Description	2 Pole	3 Pole
77 Light Duty	30	125	One Plug Fuse One Blade.....	\$ 1.65	.....
73021 Light Duty	30	125		1.75	.....
7321-7331	30	125	Two & Three Blades & Fuses..	1.85	\$ 2.90
07331	30	125	2 Fuses--2 Blades Solid Neutral	.....	2.30
07321	30	250	1 Cartridge Fuse--1 Blade.....	1.85	.....
7332-7333	30	250	Cartridge Fuses 2 & 3.....	2.50	4.35
07332	30	250	2 Fuses Solid Neutral.....	.....	3.25
7422-7432	30	250	Unfused Quick Break.....	2.40	.....
07632	60	250	2 Blades 2 Fuses Solid Neutral.	.....	7.45
07132	100	250	2 " 2 " " " " " " " " " " " "	.....	11.90

Trumbull-Vanderpoel Live Fuse Type, Without End Walls

Numbers	Amp.	Volts	Description	2 Pole	3 Pole
50321-52331	30	125	For Plug Fuses.....	\$ 2.75	\$ 3.45
50322-52332	30	125	" N. E. C. Cartridge Fuses...	3.05	3.75
50622-52632	60	250	" " " "	8.50	8.90
50122-52132	100	250	" " " "	15.35	15.95
(Dead Fuse Type)					
59321-59331	30	125	For Plug Fuses.....	2.20	3.45
59322-59332	30	250	" N. E. C. Cartridge Fuses..	3.80	3.95
59622-59632	60	250	" " " "	15.00	16.00
59122-59132	100	250	" " " "	23.85	25.60

Trumbull-Vanderpoel Test Type Without End Walls

55321-55331	30	125	For Plug Fuses.....	\$ 4.00	\$ 4.45
55322-55331	30	250	" N. E. C. Cartridge Fuses ..	4.85	4.85
55622-55632	60	250	" " " " " "	16.80	17.70
55122-550132	100	250	" " " " " "	25.60	27.32
(Non-Test Type)					
56321-56331	30	125	For Plug Fuses.....	3.65	4.00
56322-560332	30	250	" N. E. C. Cartridge Fuses ..	4.60	4.60
56622-560332	60	250	" " " " " "	16.00	16.90
56122-560132	100	250	" " " " " "	24.75	25.65

Trumbull-Vanderpoel, 30 Amp. Without End Walls

Type A		Type AA	
Testing	Not Testing	Testing	Not Testing
\$551-123 \$5.95	\$561-123 \$5.65	\$851-123 \$6.10	\$861-123 \$5.90
553-333 6.75	563-333 6.20	853-333 6.75	863-333 6.40
552-123 6.65	562-123 6.35	852-123 6.90	862-123 6.60
555-333 7.45	565-333 6.95	855-333 7.45	865-333 7.15

Trumbull-Vanderpoel[illegible]**Trumbull-Vanderpoe**

<u>2-3 & 4'</u>	<u>5'</u>	<u>7'</u>	<u>9'</u>	<u>10'</u>
45c	50c	60c	80c	85

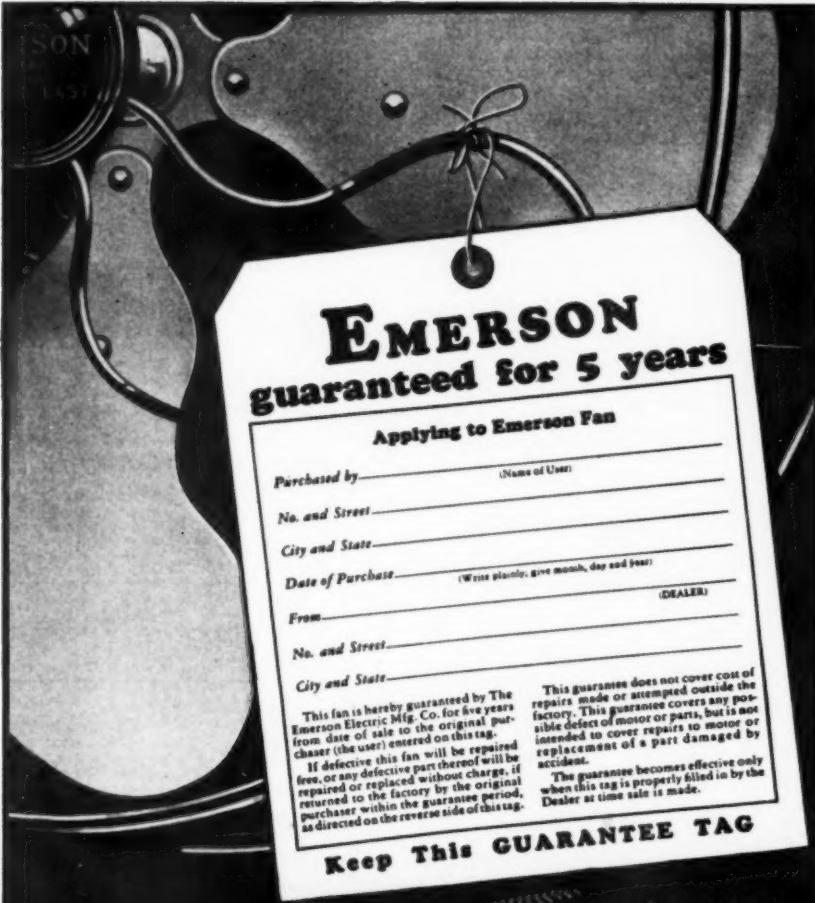
Trumbull-Vanderpoel

	30 Amp.	60 & 100 Amp.
Single Piece End Wall used with Cabinet.....	\$ 35	\$ 80
Shutters for Shutter Type End Wall.....	15	25
Conduit End Wall.....	35	80
Universal End Wall.....	40	...

MOTOR STARTING AND COMPENSATOR SWITCHES

Series	Description	Amps	Volts	2 Pole	3 Pole	4 Pole
12000	With Cart. Thermal Cutouts....	30	220	\$14.15	\$17.65	\$23.50
14000	Plug	30	220	10.70	13.50	18.50
43000	" " " "	30	220	8.10	9.90	12.80
43000	" " " "	30	440	.....	14.85	17.00
46000	Motor Starter — No Fuses	30	220	12.50	13.08	16.50
46000	" " " "	30	440	.....	19.50	23.40
46000	" " " "	30	550	.....	26.05	.....
46000	" " " "	60	220	17.10	19.50	26.60
46000	" " " "	60	440	.....	24.15	.....
48000	Compensator Switch—No Fuses	30	250	.....	13.00	16.50
48000	" " " "	60	250	.....	16.50	18.50
48000	" " " "	100	250	.....	26.00	33.00
48000	" " " "	30	550	.....	16.50	.....
48000	" " " "	60	550	.....	17.10	.....
75000	Motor Starter with Cutouts....	30	220	12.60	16.65	19.80
75000	" " " "	30	550	.....	21.60	25.50

Your Customers Can SEE...



EMERSON
guaranteed for 5 years

Applying to Emerson Fan

Purchased by _____ (Name of User)

No. and Street _____

City and State _____

Date of Purchase _____ (Write plainly, give month, day and year)

From _____ (DEALER)

No. and Street _____

City and State _____

This fan is hereby guaranteed by The Emerson Electric Mfg. Co. for five years from date of sale to the original purchaser (the user) entered on this tag. If defective this fan will be repaired free, or any defective part thereof will be repaired or replaced without charge, if returned to the factory by the original purchaser within the guarantee period, as directed on the reverse side of this tag.

This guarantee does not cover cost of repairs made or attempted outside the factory. This guarantee covers any possible defect of motor or parts, but is not intended to cover repairs to motor or replacement of a part damaged by accident.

The guarantee becomes effective only when this tag is properly filled in by the Dealer at time sale is made.

Keep This GUARANTEE TAG

EMERSON FANS
with the **5-Year Guarantee**



SEEING is believing in selling fans and every other kind of merchandise. With Emerson Fans in your stock your customers see sturdiness, reliability, high quality at a glance.

But they see something even more important—and they see it only on Emerson Fans—the Emerson 5-year factory guarantee tag. In this sign your customers see unusual protection for their fan investment. You as a dealer see complete protection against comebacks and complaints.

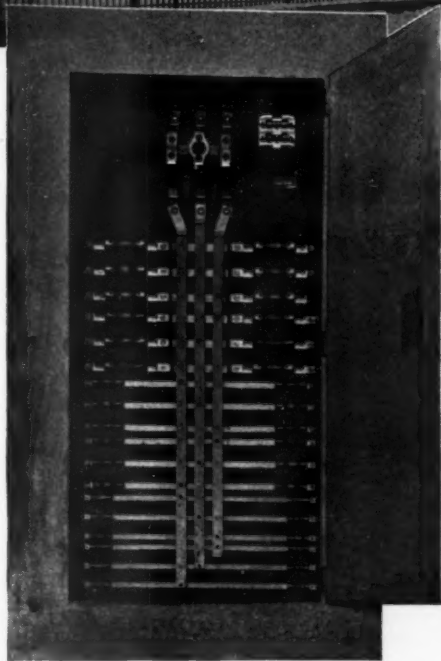
Put the 5-year guarantee to work in your store this year. Let your customers see that it pays them to patronize your store—offering fans with the strongest and most liberal guarantee in the whole fan field.

THE EMERSON ELECTRIC MFG. CO.
2018 Washington Ave., St. Louis, Mo.
806 W. Washington Blvd., Chicago, Ill.
50 Church Street, New York City

"Diamond H" Remote Control Switches are Economical!



*Hyde Park High School,
Boston, Mass.*



*Type "F" Controls Lighting Circuits
in Machine Shop.*

In public buildings such as this Hyde Park High School in Boston, Mass., the use of "Diamond H" Remote Control Switches is not only economical from the wiring standpoint, but it also safeguards the lighting and allows easier control from distant points.

For example, all of the lighting circuits of the machine shop as shown on the panel at the left are controlled by one Type "F" "Diamond H" R. C. Switch.

The main auditorium lighting circuits are controlled by a Type "G" double throw combination, in connection with an emergency circuit. This means that the Type "G" automatically throws from main circuit to the emergency circuit in case of the failure of one, and back again automatically when main circuit resumes.

Lighting is assured regardless of external conditions.

By using "Diamond H" R. C. Switches, it is not necessary to carry main conductors to switching points. This cuts costs in wiring.

*Bulletin No. 10 will tell you what they are
and how and where to use them. Sent free.*

Archs.—McLAUGHLIN & BURR, BOSTON.
Elec. Cont.—M. B. FOSTER ELEC. CO., BOSTON.

The Hart Manufacturing Co.

HARTFORD, CONN.

Boston

New York

Detroit

Chicago

San Francisco

Toronto, Can.

Minneapolis

Philadelphia

DIAMOND H SWITCHES

Safe & Economical Diamond E X-O Switches

*X-O Switches made
in all capacities.*

*Illustrated:
250 Volt, Solid Neutral*

Quality • Safety • Service and Wiring Ease Combined

Diamond E Externally Operated switches combine the best quality materials with the highest engineering skill to produce a switch easy to wire and of quality appearance, while insuring the maximum of safe and satisfactory service.

Great economy is designed into Diamond E switches...ruggedly constructed of highest grade materials, they offer additional safety and service advantages to switch users wherever the externally operated type of control is desired.

Manufacturers of:

Magnetic Switches; Externally Operated Switches; Wiring Gutter; Panels and Panellettes, Switchboards and other electrical products. Write for Complete Catalog of Diamond E Electrical Equipment.

Features

Covers lock in closed position... prevent refusing or tampering. Lock in "On" or "Off" position. Diamond E quick break mechanism, using enclosed compression type spring instead of tension type.

Switch jaws fitted for perfect contact.

Operating arm cold rolled, flawless steel.

Maximum tension provided on blades throughout contact surface.

All current carrying parts cadmium plated...non-corrosive, protective...no lacquer used.

Carry 100% overload without excessive heating.

Designed for either surface or semi-flush mounting.

Patented Diamond E concentric knockouts...no cutting or reaming necessary.

Ample wiring space...even for largest sizes.

High gloss, baked enamel finish...hard to scratch.

Shipped in individual cartons...guaranteeing first class condition when ready to use.

FACTORIES
Los Angeles, Calif.
1318-1362 E. 16th St.
Houston, Texas
1517 Fannin St.

DIAMOND ELECTRICAL
MANUFACTURING COMPANY INC.
Associated Manufacturers

FACTORIES
Milwaukee, Wis.
926 Junese St.
San Francisco, Calif.
1264 Folsom St.

Distributing Office
Portland, Oregon
218 Commonwealth Bldg.

Union Electric Mfg. Co.

Milwaukee, Wisconsin
Sales Offices and Stock

Distributing Office
Salt Lake City, Utah
228 South West Temple St.

Cleveland, Indianapolis, Detroit, Buffalo, Baltimore, New York, Philadelphia, Boston, Toronto, Montreal, St. Louis, Toledo, Grand Rapids, Chicago, Cincinnati, Pittsburgh, New Orleans, Birmingham



*The mark of
fine
ELECTRICAL
EQUIPMENT*

SHRINE HOSPITAL

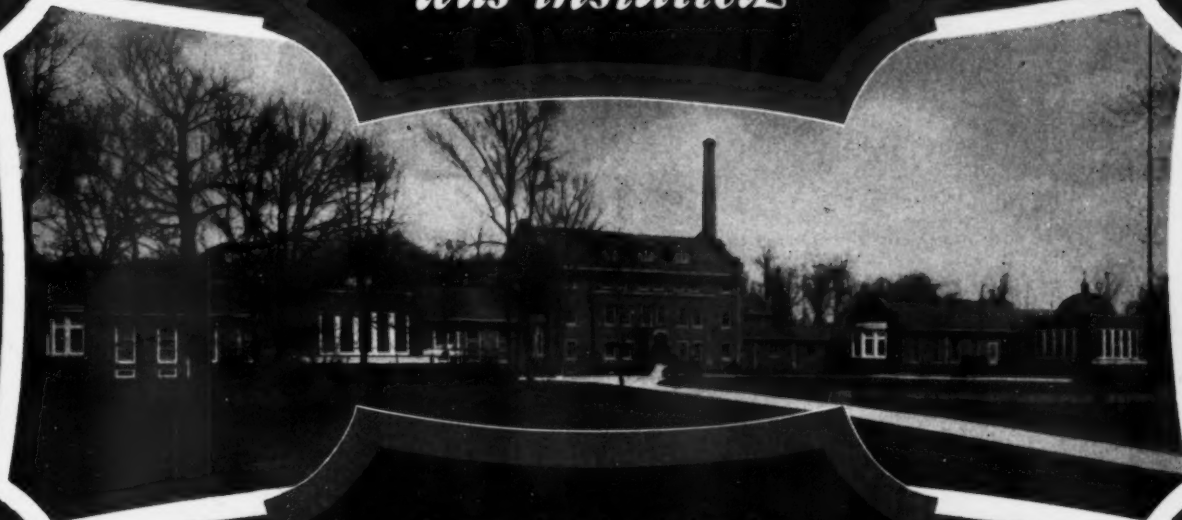
in Minneapolis

*One of the many
recent buildings*

in which

CENTRAL CONDUIT

was installed

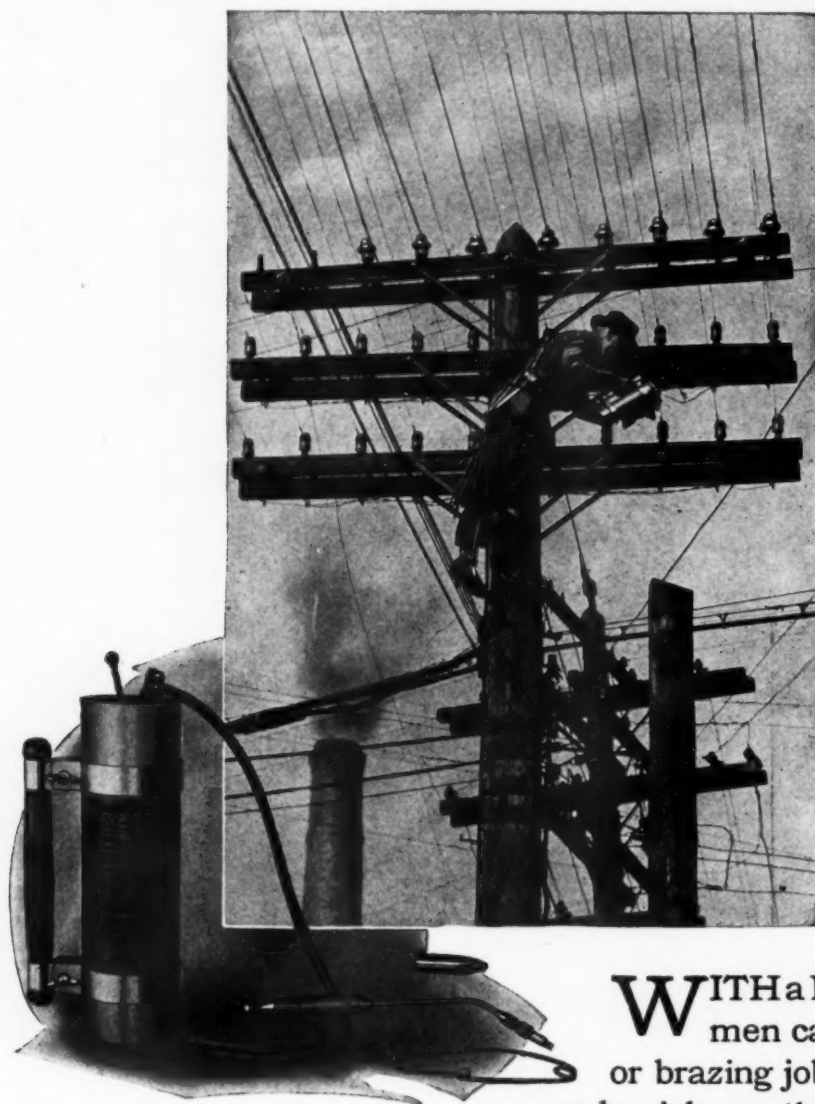


IN a modern hospital such as this, where safety is of paramount importance, it was but logical that "Central" Conduit should be chosen as a protective covering to the entire electrical wiring system—a conduit so durable that it will actually outlast the life of the building itself.

Here as well as in hundreds of other modern institutions, "Central Conduit" is used and preferred by leading contractors and architects. Every length bears the stamp of approval of the Underwriters' Laboratories.

Central Tube Company

First National Bank Bldg.
Pittsburgh



Prest-O-Lite
is the
QUICKEST
way

WITH a Prest-O-Lite torch outfit linemen can do a faster, better splicing or brazing job every time. It's convenient and quick—nothing to get ready. Just turn on the gas, light the torch and the job is under way.

Utility companies everywhere are using Prest-O-Lite equipment for installation and repair work in the field and shop. There is a Prest-O-Lite torch for every utility requirement, furnishing a wide brush flare for soldering and heating or a small sharply defined flame for soldering delicate connections.

Ask the Prest-O-Lite Gas distributor about this equipment or write us direct for complete information.

Prest-O-Lite Gas is available everywhere. Any one of 15,000 Prest-O-Lite Exchange Stations can supply you quickly with a full tank.

Prest-O-Lite
GAS

THE PREST-O-LITE COMPANY, Inc.
Unit of Union Carbide and Carbon Corporation

NEW YORK
Carbide and Carbon Building



CHICAGO
Railway Exchange Building

SAN FRANCISCO
Adam Grant Building



STEELTUBES [E.M.T.]*
has the same inside diameter
as heavy conduit. Made in
three sizes, [$\frac{1}{2}$ " , $\frac{3}{4}$ " and 1"]
with the wall-thickness
shown above. One coupling
furnished with each
ten-foot length.

10

STEELTUBES Advantages

- 1—Saves thread-cutting
- 2—Bends easily
- 3—Light—handles easily
- 4—Takes any fitting
- 5—Speeds up the job
- 6—Resists corrosion
- 7—Costs less
- 8—Standard price
- 9—Carries Underwriters' Label
- 10—Local stocks always available.

Only **THREE** pounds to a **TEN-FOOT** length

THE most remarkable thing about STEELTUBES [E.M.T.]* is that it can be so *light*, and yet so *strong*.

There's less than half as much weight to lift, and therefore less slowing down of installation work as late afternoon comes on. Lightness, too, takes most of the curse off the ceiling part of the job.

No threads to cut. STEELTUBES Adapters fit any kind of threaded or threadless fittings.

Our sample package will give you an idea of the lightness and strength of STEELTUBES, and the convenience of the STEELTUBES Adapter. It's free. Ask for it.

Electrical Division
STEEL AND TUBES, INC.
Cleveland, Ohio

(A subsidiary of Republic Iron and Steel Co.)

✧ ***STEELTUBES** Electrical Metallic Tubing
[thin-wall conduit] is threadless, strong, light and
easy to handle. Saves time and money on the job. ✧

STEELTUBES

MASON SAFETY SWITCHES

Trumbull-Vanderpool

Series	Amps.	Volts	2 Pole	3 Pole	4 Pole
8322-32-42-30	30	250	\$ 9.10	\$10.35	\$15.25
8325-35-45-30	30	250	17.55	19.90	23.40
8622-32-42-60	60	250	12.35	14.05	19.90
8625-35-45-60	60	250	18.20	20.55	24.05

SMALL ENTRANCE SWITCHES

Trumbull Electric Closed or Open Ends

Numbers	Amps.	Volts	Fusing	2 Pole	3 Pole
5790 Midget	30	125	For 1 Plug Fuse	\$1.80	.....
5791-2-3-4 & 5893 & A	30	125	Plug Fuses	1.80	\$3.45
13640-13641	30	250	No Fuse-Slate Base	2.70	4.15
13642-43 & 13743 & A	30	250	For Enclosed Fuses	2.70	4.30
13221-13321	30	250		3.40	5.15

MAIN ENTRANCE SWITCHES

Trumbull Electric Non Meter Test Solid End Wall

16361 to 16368	30	125-250	For Plug Fuses	\$2.75	\$3.45
16371 " 16378	30	"	Enclosed Fuses	3.05	3.75
16381 " 16388	60	250	"	8.50	9.00
16391 " 16398	100	250	"	15.10	16.00

METER SERVICE SWITCHES

Trumbull Electric For Meters Open End

16300 to 16309	30	125-250	For Plug Fuses	\$ 2.75	\$ 3.45
16315 " 16324	30	"	Enclosed Fuses	3.05	3.75
16330 " 16338	60	"	"	8.50	9.00
16341 " 16348	100	"	"	15.10	16.00

ACCESSIBLE FUSE METER SWITCHES

Trumbull Electric With Test Blades Without End Walls

18111	30	125	For 1 Plug Fuse	\$ 3.65	.....
18211-18311	30	125	Plug Fuses	4.00	\$4.45
18121	30	125-250	1 Enclosed Fuse	4.20	.....
18221-18321	30	"	Enclosed Fuses	4.85	4.85
18122-222-322	60	"	"	16.80	17.85
18123-223-323	100	"	"	25.60	27.50

Without End Walls and Without Test Blades

19111	30	125	For 1 Plug Fuse	\$ 3.35	.....
19211-19311	30	125-250	Plug Fuses	3.65	\$4.00
19121	30	"	1 Enclosed Fuse	3.85	.....
19221-19321	30	"	Enclosed Fuses	4.55	4.55
19122-222-322	60	"	"	16.00	16.80
19123-223-323	100	"	"	24.75	25.65

SEALED FUSE METER SWITCHES

Trumbull Electric With Test Blades Without End Walls

15827	30	125	For 1 Plug Fuse	\$ 2.25	.....
28111-28211-28311	30	125	Plug Fuses	3.25	\$ 3.45
28121	30	125	1 Enclosed Fuse	3.50	.....
28221-28321	30	125-250	Enclosed Fuses	3.75	4.00
28122-28222-28322	60	"	"	15.10	16.00
28123-223-323	100	"	"	23.90	25.65

UNIVERSAL METER SERVICE SWITCHES

Trumbull Electric

#971-123	For Details See Trumbull Catalog	\$3.45	Less End Wall	.....
972-123	"	4.30	"	"
973-333	"	3.75	"	"
975-333	"	4.85	"	"
979-333	"	4.85	"	"

END WALLS, SHUTTERS, TROUGHS

Trumbull Electric

One Piece End Wall for 30 Amp. Switch, \$.30	For 60 & 100 A. Switches, \$.80
Shutter for	.15
Troughs—2-3 & 4" .37	5" .41 6" .44 7" .52 8" .55
Distribution Cutout Block—#5850—Less Fuses	1.10

TYPE "A" SWITCHES

Trumbull Electric Single Throw, Quick Make & Break

Amps.	2 Pole	3 Pole	250 Volts Fusible	250 Volts Unfused
30
60
100
200
30
60
100
200

"R.M." & TYPE "A" SMALL MOTOR STARTING SWITCHES

Trumbull Electric

250 V. 2 Position	2 Pole	3 Pole	2 Pole	60 Amp.	3 Pole
.....
600 V. " " " "
110-550 Invers. Time
250 " " " "
600 Snuff Arc

TYPE "C" SWITCHES

Trumbull Electric Single Throw, Quick Break Only

Amps.	2 Pole	3 Pole	250 Volts Fusible	250 Volts Unfused
30
60
100
200
30
60
100
200

R. M. SAFETY SWITCHES

Trumbull Electric, All 30 Amp.

Volts	Fused	Not Fused	Numbers	2 Pole	3 Pole	4 Pole
250-600 AC	Fusable	.....	46261-46361-46461	\$ 5.40	\$ 7.20	\$ 9.90
250 Volts	.....	.....	92221-92321-92421	6.30	8.10	10.80
600 " AC	.....	.....	92261-92361	13.05	13.95	.....

TYPE "A" MOTOR STARTING SWITCHES

Trumbull Electric

Phase	Numbers	Cycle	110 Volt	220 Volt	440 Volt	550 Volt
Single
3 Phase
2 Phase
3 Wire
4 " "

TUMBLER SWITCHES

Trumbull Electric

#2221	\$2.25	#2221E	\$3.85	#3221	\$1.60	#2361	\$6.00
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MIDGET & TYPE "OO"

Westinghouse Residence Type

Midget	2 Pole	3 Pole
62612-62613	\$1.65
00 For Plug Fuses 125-250 V.-2 Blades	.....	.....
" " Solid Neutral	60963	1.80
" " 2 & 3 " "	.....	.....
" " Cartridge Fuse	60989	2.50
" " 250 Volts " "	.....	.....
" " Non-Fusible 250 Volts	60990	2.55
" " 125-250 Volts Solid Neutral	.....	.....

METER SERVICE SWITCHES

Westinghouse Type "WK-54" Without End Walls

Amps.	Fused	2 Pole	3 Pole	Live Fuse Type
30
60
100

POLYPHASE METER SWITCHES

Westinghouse "WK-54"

30 Amp. No. 60997 With End Wall	\$11.50	No. 60266 Less End Wall	\$11.00
60 " " 60998 " " "	17.50	" 60267 " " "	16.50
100 " " 60999 " " "	27.50	" 60268 " " "	26.00

ACCESSIBLE FUSE TYPE

Westinghouse "WK-65" Without End Walls

Amps.	Fused	2 Pole	3 Pole	Without Test Facilities
30
60
100

UNIVERSAL

Westinghouse "WK-57" Meter Service Switches Without End Walls

All 30 Amp.	For Full Details See	#57924	\$3.45
125 Volt	Westinghouse	57925	4.00
Standardized	Switch Catalog #282	57926	3.75
		57928	5.15
		57931	5.15

METER TRIMS—END WALLS—TROUGHS

Westinghouse

One Piece Meter Trims	30 Amp.	60 & 100 Amp.
Blank End Wall or Shutter Type End Wall	\$0.30	\$0.75
Shutter Type Meter Trim or Adaptor Trim	.15	.25
New Universal Trim with slide	.35	.....
Replacement Plate or Adapting Plate	.15	.....
Wiring Trough—2-3 & 4" long	\$.40 5" \$.45 6" \$.50 7" \$.55 8" \$.60	.....
Fuse Receptacle #R57252	.....	Less Fuses, \$1.25

Switches

QUICK MAKE & BREAK

Westinghouse Industrial "WK-60" or "66"

250 Volts Fusible				500 Volts AC Fusible			
Amps.	2 Pole	3 Pole		2 Pole	3 Pole		
30.....	#60100 \$10.90	#66101 \$12.70		#60154 \$14.55	#60155 \$18.15		
60.....	60103 13.65	60104 17.25		60157 16.35	60158 19.10		
100.....	60106 20.90	60107 27.25		60160 25.45	60161 29.05		
200.....	60109 32.70	60110 36.30		60163 40.00	60164 45.40		

250-500 Volts Non-Fusible				600 Volts Non-Fusible			
Amps.	2 Pole	3 Pole		2 Pole	3 Pole		
30.....	#60050 \$11.80	#60051 \$14.10		#60045 \$16.35	#60046 \$20.45		
60.....	60053 11.80	60054 14.50		60048 17.25	60049 21.80		
100.....	60133 20.00	60134 21.80		60057 25.00	60058 32.70		
200.....	60136 25.45	60137 30.90		60060 33.60	60061 47.25		

QUICK BREAK ONLY

Westinghouse "WK-62" Type "C"

250 Volts Fusible				500 Volts AC Fusible			
Amps.	2 Pole	3 Pole		2 Pole	3 Pole		
30.....	#62100 \$ 5.50	#62101 \$ 6.80		#62200 \$ 9.00	#62201 \$ 8.65		
60.....	62103 8.20	62104 10.00		62203 10.00	62204 10.90		
100.....	62106 12.70	62107 15.40		62206 14.50	62207 17.25		
200.....	62109 20.00	62110 26.30		62209 29.00	62210 32.70		

250-500 Volts Non-Fusible				600 Volts Non-Fusible			
Amps.	2 Pole	3 Pole		2 Pole	3 Pole		
30.....	#62047 \$ 7.70	#62048 \$ 8.15		#62051 \$ 9.00	#62052 \$11.80		
60.....	62013 8.20	62014 8.65		62054 10.50	62055 15.40		
100.....	62016 10.90	62017 12.25		62057 15.00	62058 23.60		
200.....	62019 19.00	62020 22.70		62060 25.40	62061 41.75		

MOTOR STARTING SWITCHES

Westinghouse

Type	Numbers	Volts	Fused For	2 Pole	3 Pole	4 Pole
WK-10	55863	110-220	For Plug Fuse	\$ 9.10		
WK-10	55864	110 to 440	" " "		\$11.00	
WK-11	62611	110	" " "	3.40		
WK-12	584627	115-230	For One Plug	4.40		
WK-12	584628	115-230	" Two "	6.00		
WK-15	545404	110-220	For Plug Fuse	10.00		
WK-15	545405	110-220	" Cart "	12.70		
WK-20	55865	110-220	" Plug "	12.75		
WK-20	57530	110 to 550	" Cart "	13.60		
WK-20	55866-57529	110 " 550	" Plug "	13.60	\$21.00	
WK-21	57551 1 Phase.	110-220	1 Cart.	36.30		
WK-21	57551 3 "	220-550	2 "	38.10		
WK-22	60617-60638	220	For Cart. Fuse	18.25	29.00	
WK-22	60950-60951	550	" " "	23.60	34.50	

GENERAL UTILITY SWITCHES

Noark Closed Ends

Numbers	Amps.	Volts	Fused For	2 Pole	3 Pole
8283.....	30	125	For Plug Fuses	\$1.65	
8383-8483-8393	30	125	" " "	1.80	\$2.50
8683-8693	30	125	" Quick Break.	2.75	3.20

METER SERVICE SWITCHES

Noark Sealed Service SECO Without End Walls

Test Type				Non Test Type			
Amps.	Fused For	No.	Price	No.	Price	No.	Price
30A Plug.....	9543	\$3.25	9523 \$4.45	8543	\$2.85	8523	\$3.00
30A Enclosed.....	9563	3.75	9533 4.00	8563	3.40	8533	3.55
30A Plug & Enc.....	9573	3.50		8573	3.15	8593	2.40
60A Enclosed.....	9566	15.05	9536 15.95	8566	14.20	8536	15.05
60A ".....	9576	14.15		8576	23.30		
100A ".....	9561	23.85	9531 25.60	8561	23.00	8531	23.85

Noark Accessible Service ACCO Without End Walls

Test Type				Non Test Type			
Amps.	Fused For	No.	Price	No.	Price	No.	Price
30A Plug.....	9343	\$3.65		8343	\$3.35		
30A ".....	9353	3.95	9323 \$4.45	8353	3.65	8323	\$3.95
30A Enclosed.....	9363	4.85	9333 4.85	8363	4.55	8333	4.55
60A ".....	9366	16.80	9336 17.70	8366	15.95	8336	16.80
100A ".....	9361	25.60	9331 27.40	8361	24.75	8331	25.60

Noark Universal Without End Plates

No.	Price	No.	Price
971123	—Without End Walls.....	\$3.45	
" 9723	" " "	4.65	
" 972123	" " "	4.30	
" 973333	" " "	3.75	
" 9753 & 9793	" " "	5.20	
" 975333-979333	" " "	4.85	

Noark Doall Without End Plate

2 Pole				3 Pole			
Amps.	Fused For	Numbers	Price	Numbers	Price		
30A Plug.....		913123-911123	\$ 2.70	912333-914333	\$ 3.45		
30A Enclosed.....		923123-921223	3.05	922333-924333	3.75		
60A ".....		923126-921226	8.45	925336	8.90		
100A ".....		923121-921221	15.05	925331	15.95		

NUBLADE SWITCHES

Noark Fusible

250 Volts Fusible				500 Volts AC Fusible			
Amps.	2 Pole	3 Pole		2 Pole	3 Pole		
30	8223 \$ 4.50	8233 \$ 5.05		8423 \$ 9.00	8433 \$ 8.55		
60	8226 8.10	8236 9.90		8426 9.90	8436 10.80		
100	8221 12.60	8231 15.30		8421 14.40	8431 17.10		
200	8222 19.80	8232 26.10		8422 28.80	8432 32.40		
400	8224 48.60	8234 66.60					

Noark Not-Fusible—Quick Break

2 Pole				3 Pole			
Amps.	Volts	No.	Price	No.	Price	No.	Price
30	250	8723	\$ 2.70	8733	\$ 4.05	8743	\$ 8.10
30	500 AC	8623	7.65	8633	8.10	8643	10.80
60	250-500	8626	8.10	8636	8.55	8646	13.50
100	250-500	8621	10.80	8631	12.15	8641	20.70
200	250-500	8622	18.90	8632	22.50	8642	37.80
400	250-500	8624	39.60	8634	54.00	8644	86.40

March, 1929

ACCESSORIES FOR NOARK SWITCHES

Single Piece End Wall for 30 Amp. Switches.....	\$.30	For 60 & 100 Amp.....	\$.80
Shutter for " " " "	.15	" 60 " 100 " " "	.30
Universal End Wall No. 909103.....	.40		
Blanking Side No. 908103-908203.....	.15		
Trough—3 & 5' \$.40—6' \$.45—7'.....	.50	8'—\$.55—9'.....	.80
Cabinet Fuse Block No. 902413.....	1.25		

POLYPHASE

Noark Switches Without End Walls

125-250 Volts				Main Entrance			
"Doall" & 3 Wire				"Acco" Quad Break "Seco" Quad Break			
Amps.	No.	Price		No.	Price	No.	Price
30A.....	851233	\$ 4.70		77033	\$10.50	77533	\$10.40
60A.....	851236	11.70		77036	18.60	77536	15.05
100A.....	851231	19.20		77031	28.25	77531	24.75

Meter Service							
Amps.	No.	Price		No.	Price	No.	Price
30A.....	931233	\$11.05		67033	\$11.15	67533	\$11.05
60A.....	931236	16.65		67036	20.35	67536	16.80
100A.....	931231	26.15		67031	30.00	67531	26.50

MAIN ENTRANCE SWITCHES

Noark Doall Without End Walls

Amps.	Fused For	2 Pole	Price	3 Pole	Price
30	Plug Fuses	813123-811123	\$ 2.70	812333-814333	\$ 3.45
30	Enclosed Fuses	853123-851223	3.75	852333-854333	4.30
60	" "	853126-851226	8.45	855336	8.90
100	" "	853121-851221	15.05	855331	15.95

SOLID NEUTRAL SWITCHES

Noark Fusible—Quick Break

Amps.	Volts	3 Pole-2 Poles	Price	4 Pole-3 Poles	Price	5 Pole-4 Poles	Price
30	125-250	8133	\$ 4.95	8143	\$ 8.10	8153	\$ 9.00
60	" "	8136	9.00	8146	11.25	8156	19.80
100	" "	8131	14.40	8141	19.80	8151	35.55
200	" "	8132	22.50	8142	31.50	8152	50.40
400	" "	8134	63.00	8144	81.00	8154	120.60

TOGGLE SWITCHES

Bulldog

30 A.—125 V.—2 Pole—One Blade				No. 111 & 211			
				BT-TE-TF			
" " " 2 " Two "				" & TM			\$ 1.80
" " " 3 " Three "				TE-211S			4.50
" " " 3 " Three "				TE-311B			5.00
" " " 3 " Three "				TE-311S			8.10
" " " 250 " 2 " Two "				TE-311SG			7.20
" " " 3 " Three "				TF-221S			5.40
" " " 3 " Three "				TF-321S			8.10
" " " 3 " Three "				TF-321SG			7.65
30 A.—500-600 V.—3 Pole—Three Blade 3 Fuse Conn.				TF-351S			12.60
" " " 250-600 " 2 " "				TN-261S			5.40
" " " 3 " "				TN-361S			7.20
" " " 3 " "				TN-361SR			10.80
Motor Starter	3 " "	TJM-321S & TJM-321SU					9.00

TYPE "C" SWITCHES

Bulldog Single Throw Fusible Quick Make & Break

250 Volts DC & AC							
Amps.	2 Pole	3 Pole		2 Pole	3 Pole		
30 125 Volt only.....	JF211S	\$ 3.00		JF311S	\$ 4.40		
30 Porc. Base.....	JF221S	3.15		JF321S	5.15		
30 End Plates.....	JF221P	3.15		JF321P	5.15		
30 Slate Base.....	JF221	5.40					
60 " ".....	JF222	8.10		JF322	9.90		
100 " ".....	JF223	12.60		JF323	15.30		
200 " ".....	JF224	19.80		JF324	28.10		
400 " ".....	SF225	48.60		SF325	66.60		

500-600 Volts A. C.							
Amps.	3 Pole	4 Pole		3 Pole	4 Pole		
30 125 Volt only.....							
30 Porc. Base.....							
30 End Plates.....							
30 Slate Base.....	JF351	\$ 8.50		JF451	\$ 13.50		
60 " ".....	JF352	10.80		JF452	14.40		
100 " ".....	JF353	17.10		JF453	29.80		
200 " ".....	JF354	32.40		JF454	46.80		
400 " ".....	SF355	81.00		SF455	126.00		

SERVICE ENTRANCE SWITCHES

Bulldog				
Black 30 Amp.	2 Pole		3 Pole	
125 Volt For Plug Fuses	JE211 S & P	\$1.80	JE311 S & P	\$3.00
250 " " Cart. Fuses	SF221 S & P	2.70		
250 " Not Fusible	SN221 S & P	2.70		

"TYPE A"

Bulldog Single Throw Quick Make and Break

		2 Pole		3 Pole	
		Number	Price	Number	Price
250 Volts Fusible					
30 Amp.		SF-221	\$ 10.80	SF-321	\$ 12.60
60 "		SF-222	18.60	SF-322	17.10
100 "		SF-223	20.70	SF-323	27.00
200 "		SF-224	32.40	SF-324	36.00
400 "		SF-225	63.00	SF-325	81.00
500-600 Volts Fusible					
30 Amp.				SF-351	18.00
60 "		For		SF-352	19.90
100 "		2 Pole		SF-353	28.80
200 "		See 600 Volt		SF-354	45.00
400 "		Fusible		SF-355	88.00
		Below			
250-500-600 Not Fusible					
30 Amp.		SN-221	\$ 9.45	SN-321	11.25
60 "		SN-251	11.70	SN-351	13.95
100 "		SN-253	19.80	SN-353	21.60
200 "		SN-254	25.20	SN-354	30.60
400 "		SN-255	54.00	SN-355	63.00
600 Volts Fusible					
30 Amp.		SF-261	22.30	SF-361	19.30
60 "		SF-262	22.60	SF-362	19.80
100 "		SF-263	33.25	SF-363	31.70
200 "		SF-264	57.60	SF-364	48.60
400 "		SF-265	120.00	SF-365	122.00
600 Volts Not Fusible					
30-60 Amp.		SN-261	12.60	SN-361	16.20
100 "		SN-263	20.25	SN-363	24.75
200 "		SN-264	26.50	SN-364	33.75
400 "		SN-265	65.50	SN-365	87.75

4 Pole				
Number	Price	Number	Price	
250 Volts Fusible				
30 Amp.				
60 " SF-421	\$ 16.20			
100 " SF-422	21.60			
200 " SF-423	36.00			
400 " SF-424	54.00			
	SF-425	108.00		
500-600 Volts Fusible				
30 Amp.				
60 " SF-451	21.60			
100 " SF-452	23.40			
200 " SF-453	47.80			
400 " SF-454	57.60			
	SF-455	126.00		
250-500-600 Not Fusible				
30 Amp.				
60 " SN-421	16.20			
100 " SN-451	19.80			
200 " SN-453	28.80			
400 " SN-454	40.00			
	SN-455	108.50		
600 Volts Fusible				
30 Amp.				
60 " SF-461	23.40			
100 " SF-462	25.20			
200 " SF-463	39.60			
400 " SF-464	59.40			
	SF-465	144.00		
600 Volts Not Fusible				
30-60 Amp.				
100 " SN-461	21.75			
200 " SN-463	29.70			
400 " SN-464	43.65			
	SN-465	120.60		

COMPENSATOR SWITCHES "A"

Bulldog Quick Make & Break Fusible

250 Volt AC				
Amps	3 Pole	4 Pole	3 Pole	4 Pole
30 A.	SF321 C	\$16.20	SF421 C	\$ 21.60
60 A.	SF322 C	20.25	SF422 C	26.10
100 A.	SF323 C	31.60	SF423 C	46.80
200 A.	SF324 C	45.90	SF424 C	64.80
400 A.	SF325 C	94.50	SF425 C	129.00
500-600 Volts AC				
Amps	3 Pole	4 Pole	3 Pole	4 Pole
30 A.	SF351 C	\$20.70	SF451 C	\$32.40
60 A.	SF352 C	21.00	SF452 C	36.00
100 A.	SF353 C	33.75	SF453 C	61.20
200 A.	SF354 C	50.40		
400 A.	SF355 C	105.60		

COMPENSATOR SWITCHES "A"

Bulldog Quick Break Only 600 Volts 3 Pole Only Fusible

Amps.—3 Pole	30 A.	60 A.	100 A.	200 A.
Number—3 Pole	SF-361 C	SF-362 C	SF-363 C	SF-364 C
Price—3 Pole	\$23.00	\$23.40	\$36.90	\$54.00

MOTOR STARTERS

Bulldog

3 Pole				
30 Amp-Type	C-Port. Base-110 to 440 Volt		IM-3215	\$ 6.75
30 " " A	C-Slate " 440 & 550 "		IM-351	11.70
30 " " A	250 Volt		MF-321	17.00
60 " " A	500 "		MF-351	23.75
60 " " A	250 "		MF-322	23.50
60 " " A	500 "		MF-352	28.80
4 Pole				
30 Amp-Type	C-Port. Base-110 to 440 Volt			
30 " " A	C-Slate " 440 & 550 "		MF-421	\$22.80
30 " " A	250 Volt		MF-451	35.25
60 " " A	500 "		MF-422	29.45
60 " " A	250 "			
60 " " A	500 "			

NOTE: For Bulldog Switches not listed deduct 10% from Bulldog Lists.

SMALL ENTRANCE SWITCHES

Columbia, 30 Amp.

Description				
Single Fused Single Blade-125 Volt-Plug Fused			2 Pole	
Double " Double " 125 " " "			320-321	\$1.40
" " " " 250 " " "			1930	1.65
" " " " 250 " Cartridge Fused			3930	1.90
			322	2.35
			422	2.60
Description				
Single Fused-Single Blade-125 Volt-Plug Fused			3 Pole	
Double " Double " 125 " " "			1931-2	\$2.15
" " " " 250 " " "			3931-1	2.50
" " " " 250 " Cartridge Fused			326	4.00
			423	4.50

BRANCH CIRCUIT ENTRANCE SWITCHES

Columbia

30 Amp. Series	2 Pole	4 Pole	6 Pole	8 Pole
2401 to 2406	\$4.00	\$5.00	\$5.35	\$6.00
3401 to 3406	5.00	6.35	6.65	7.35
3501 to 3506	4.85	6.00	6.35	7.00

INDUSTRIAL SWITCHES

Columbia

Series 70 Type C Fusible				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
250 Volts Fusible				
30A	Number	Price	Number	Price
60A	C7001	\$ 9.40	C7002	\$11.60
100A	C7004	12.10	C7005	15.75
200A	C7007	19.10	C7008	24.00
	C7010	28.35	C7011	35.00

Series 70 Type A Fusible				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
250 Volts Fusible				
30A	Number	Price	Number	Price
60A	A7001	\$10.45	A7002	\$13.00
100A	A7004	13.30	A7005	17.65
200A	A7007	21.75	A7008	27.90
	A7010	31.00	A7011	39.00

Series 71-500 Volts Fusible				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
500 Volts Quick Make & Break				
30A	Number	Price	Number	Price
60A	7101	\$13.60	7102	\$15.75
100A	7104	14.15	7105	16.10
200A	7107	23.80	7108	27.00
	7110	38.25	7111	42.80

Series 73-500 Volts Unfused				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
500 Volts Quick Make & Break				
30A	Number	Price	Number	Price
60A	7301	\$11.00	7302	\$12.90
100A	7304	11.00	7305	13.40
200A	7307	17.35	7308	19.60
	7310	24.00	7311	28.80

Series 72-600 Volts Fusible				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
600 Volts Quick Make & Break				
30A	Number	Price	Number	Price
60A	7201	\$14.80	7202	\$16.25
100A	7204	14.80	7205	16.75
200A	7207	24.50	7208	27.60
	7210	39.00	7211	43.00

Series 74-600 Volts Unfused				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
600 Volts Quick Make & Break				
30A	Number	Price	Number	Price
60A	7401	\$11.90	7402	\$14.50
100A	7404	12.60	7405	15.10
200A	7407	19.20	7408	21.75
	7410	25.50	7411	29.65

Series 20-250 Volts Fusible				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
Quick Break Only				
30A	Number	Price	Number	Price
60A	2022	\$ 5.15	2023	\$ 6.95
100A	2025	6.95	2026	8.00
200A	2028	10.95	2029	13.55
	2031	19.35	2032	24.20

Series 23-250-500 Volts Unfused				
Amps	2 Pole	3 Pole	4 Pole	5 Pole
Quick Break Only				
30A	Number	Price	Number	Price
60A	2322	\$ 4.85	2323	\$ 6.35
100A	2325	9.10	2326	9.70
200A	2328	11.50	2329	12.70
	2331	19.40	2332	23.60

Series 30—Quick Break—250 Volts For Meter Trims

30 Amp.				
2 Pole	3 Pole	4 Pole	5 Pole	6 Pole
3022	\$5.65	3025	\$ 8.90	
3023	7.65	3026	10.00	
100 Amp.				
3028	\$12.70	3031	\$15.35	
3029	16.30	3032	24.85	

MOTOR STARTING SWITCHES

Columbia, 250 Volts

2 Pole				
30 Amp. Motor Start Switch	6001	\$12.70	6002	\$17.00
60 " " " "	6004	13.30	6005	17.45
4 Pole				
30 Amp. Motor Start Switch	6008	\$20.00		
60 " " " "	6006	27.30		

Switches

30 Amp. Switches			Wadsworth 30 Amp. Switches			30 Amp. Switches		
No.	Price		Number	Price		Number	Price	
25	\$2.20		322	\$ 6.20		1428T	\$ 5.45	
26	2.65		331	4.85		1450	3.65	
27	2.50		332	6.55		1450T	4.25	
30	1.55		340	4.75		1451	3.95	
31	1.55		341	5.05		1451T	4.60	
33	1.65		360	3.20		1500	4.15	
38	2.50		361	4.55		1502	4.80	
39	3.75		362	4.15		1503	4.80	
131	3.90		370	4.15		1511	4.50	
132	3.30		372	4.95		1512	5.10	
133	3.90		380	5.05		1530	9.40	
141	4.15		382	5.15		1532	10.00	
142	3.75		392	5.45		1543	5.10	
143	4.15		440	6.20		1612	4.05	
144	4.55		441	6.55		1630	9.15	
145	4.95		443	6.55		1632	9.85	
151	3.40		461	7.05		1643	4.25	
152	3.00		462	6.70		2284	6.70	
153	3.40		463	7.05		2294	7.05	
154	4.45		464	6.70		2441	6.55	
211	4.15		483	5.35		2461	7.05	
212	3.75		734	11.15		2462	6.70	
213	4.15		1013	4.20		2463	7.05	
214	3.75		1014	6.10		2464	6.70	
221	2.65		1202	3.95		2534	6.75	
223	2.40		1212	4.25		2632	3.25	
224	3.00		1223	4.75		2633	4.65	
235	3.75		1250	3.65		2639	4.65	
241	5.45		1322	4.15		3032	11.15	
242	5.10		1323	4.75		3033	12.00	
243	5.45		1402	3.95		3532	9.10	
244	5.10		1403	4.25		3533	10.00	
271	4.00		1401T	4.55		3534	13.30	
272	4.00		1402T	4.55		3539	10.00	
273	4.70		1403T	4.80		3632	16.80	
274	4.40		1411T	5.15		3633	21.15	
284	5.20		1412	4.25		3634	22.05	
292	4.00		1412T	5.20		3639	21.10	
294	5.75		1423	4.75		.....	.....

60 Amp. Switches			Wadsworth 100 Amp. Switches			200 Amp. Switches		
No.	Price		Number	Price		Number	Price	
161	\$ 9.60		102	\$15.70		522	\$19.80	
162	9.15		110	16.55		523	24.95	
163	11.80		111	16.55		722	37.05	
171	9.35		112	15.70		723	51.90	
172	9.15		113	18.95		724	57.35	
503	11.45		513	17.25		729	52.00	
1024	11.40		1033	11.35		1042	14.20	
1762	16.30		1034	16.50		1043	22.00	
1763	22.75		1712	27.35		1044	31.35	
1764	21.45		1713	35.40		2622	18.15	
1769	21.70		1714	35.00		2623	21.45	
1800	15.70		1719	30.90		2624	40.85	
1802	16.55		1900	24.35		2629	19.80	
1803	17.40		1902	25.20		3522	27.20	
1812	17.40		1903	26.10		3523	31.15	
1830	19.10		1912	26.10		3524	43.15	
1834	20.90		1930	28.70		3529	31.15	
1842	17.40		1934	30.50		3622	41.60	
1843	18.25		1942	26.10		3623	47.35	
1851	16.55		1943	27.90		3624	53.20	
2030	15.65		1951	26.10		3629	47.35	
2034	17.40		2130	25.20				
2042	16.70		2134	26.95				
2043	16.55		2142	24.40				
2051	14.80		2143	26.10				
2662	8.70		2151	24.40		642	\$55.45	
2664	13.30		2614	25.60		643	67.65	
3662	17.05		3512	14.65		742	61.65	
3663	22.05		3513	17.75		743	75.13	
3664	24.00		3514	25.60		744	91.30	
3669	22.05		3519	17.75		1052	36.30	
3562	9.75		3612	24.85		1053	47.85	
3563	11.55		3613	31.95		1054	66.00	
3564	13.75		3614	35.90		2542	49.50	
3569	11.55		3619	31.95		2543	61.00	
						2544	86.65	
						3542	54.45	
						3543	78.40	
						3544	94.05	
						3549	78.35	

EXTRA END WALLS—SHUTTERS—TRIMS—ETC.

Wadsworth			Type of Trim			Knock-Meter out & Shut-		
For	30 Amp.	125 Volt Switches	Flat	Extended	Shutter	Shutter	ter	
"	30	" 250	"	"	"	"	"	\$.17
"	60	" 250	" 2 Pole	"	"	"	"	..
"	60	" 250	" 3 "	"	"	"	"	..
"	100	" 250	" 2 "	"	"	"	"	..
"	100	" 250	" 3 "	"	"	"	"	..
"	200	" 250	" 2 "	"	"	"	"	..
"	200	" 250	" 3 "	"	"	"	"	..

S-SUNDRIES

STEEL WOOD SCREWS
Flat Head

Length	Number Per Dozen	Up To 4	No. 5	No. 6	No. 7	No. 8
1/4"	"	.05	.05	.05	.05	.05
3/8"	"	.05	.05	.05	.05	.05
1/2"	"	.05	.05	.05	.05	.05
5/8"	"	.05	.05	.05	.05	.05
3/4"	"	.05	.05	.05	.05	.05
1"	"	.05	.05	.05	.05	.05
1 1/4"	"	.05	.05	.05	.05	.05

March, 1929

STEEL WOOD SCREWS—Flat Head—Continued

Length	Number Per Dozen	Up To 4	No. 5	No. 6	No. 7	No. 8
1/4"	"	.05	.05	.05	.05	.05
3/8"	"	.05	.05	.05	.05	.05
1/2"	"	.05	.05	.05	.05	.05
5/8"	"	.05	.05	.05	.05	.05
3/4"	"	.05	.05	.05	.05	.05
1"	"	.05	.05	.05	.05	.05
1 1/4"	"	.05	.05	.05	.05	.05
1 1/2"	"	.05	.05	.05	.05	.05
1 3/4"	"	.05	.05	.05	.05	.05
2"	"	.05	.05	.05	.05	.05
2 1/4"	"	.05	.05	.05	.05	.05
2 1/2"	"	.05	.05	.05	.05	.05
2 3/4"	"	.05	.05	.05	.05	.05
3"	"	.05	.05	.05	.05	.05
3 1/4"	"	.05	.05	.05	.05	.05
3 1/2"	"	.05	.05	.05	.05	.05
3 3/4"	"	.05	.05	.05	.05	.05
4"	"	.05	.05	.05	.05	.05

BRASS SCREWS

Round, Flat or Oval Head

Length	Number Per Dozen	Up To 4	No. 5	No. 6	No. 7	No. 8	No. 9
1/4"	"	.06	.06	.06	.06	.06	.06
3/8"	"	.06	.06	.06	.06	.06	.06
1/2"	"	.06	.06	.06	.06	.06	.06
5/8"	"	.06	.06	.06	.06	.06	.06
3/4"	"	.06	.06	.06	.06	.06	.06
1"	"	.06	.06	.06	.06	.06	.06
1 1/4"	"	.06	.06	.06	.06	.06	.06
1 1/2"	"	.06	.06	.06	.06	.06	.06
1 3/4"	"	.06	.06	.06	.06	.06	.06
2"	"	.06	.06	.06	.06	.06	.06
2 1/4"	"	.06	.06	.06	.06	.06	.06
2 1/2"	"	.06	.06	.06	.06	.06	.06
2 3/4"	"	.06	.06	.06	.06	.06	.06
3"	"	.06	.06	.06	.06	.06	.06

Length	Number Per Dozen	No. 10	No. 12	No. 14	No. 16	No. 18
1/4"	"	.11	.11	.11	.11	.11
3/8"	"	.12	.12	.12	.12	.12
1/2"	"	.14	.14	.14	.14	.14
5/8"	"	.15	.15	.15	.15	.15
3/4"	"	.16	.16	.16	.16	.16
1"	"	.18	.18	.18	.18	.18
1 1/4"	"	.20	.20	.20	.20	.20
1 1/2"	"	.22	.22	.22	.22	.22
1 3/4"	"	.24	.24	.24	.24	.24
2"	"	.26	.26	.26	.26	.26
2 1/4"	"	.28	.28	.28	.28	.28
2 1/2"	"	.30	.30	.30	.30	.30
2 3/4"	"	.32	.32	.32	.32	.32
3"	"	.34	.34	.34	.34	.34

For Gross Lots Multiply dozen price 7 times.

LAG SCREWS

Length	Price Each	3"	3 1/2"	4"	4 1/2"	5"	6"
1/4"	"	.05	.05	.05	.05	.05	.05
3/8"	"	.05	.05	.05	.05	.05	.05

STRAPS—CLIPS OR CLAMPS

Without Screws, For Pipe

Tinned Straps 2 Hole Price Each	1/4-3/8"	3/8"	1/2"	3/4"	1"	1 1/4"
Light Steel Straps-1 Hole Price Each	.01	.01	.01	.01	.01	.01
Mall. Iron Straps-1 Hole Price Each	.03	.03	.03	.03	.03	.03
Tinned Straps 2 Hole Price Each	.07	.07	.07	.07	.07	.07
Light Steel Straps-1 Hole Price Each	.10	.10	.10	.10	.10	.10
Mall. Iron Straps-1 Hole Price Each	.15	.15	.15	.15	.15	.15
Tinned Pipe Straps—Per Pound	.20	.20	.20	.20	.20	.20

SOLDER

40-60 Bar or Wire	50-50 Bar or Wire	Resin Core	Ribbon 30-70	Allen Alumi-Flux
Per Pound	\$.70	\$.85	\$ 1.15	\$ 2.70
Per Ounce	.10	.10	.10	.20

SOLDER PASTE

Make	2 oz. Cans	2 oz. Tubes	4 oz. Cans	Half Pound Cans	One Pound Cans
Allen	\$.30	\$.40	\$.55	\$.90	\$ 1.45
Burnley	.20	.20	.30	.40	.70
Crescent	.25	.25	.35	.55	.85
G. E.	.20	.20	.30	.40	.70
Highland	.30	.30	.40	.60	.90
Nokorode	.20	.20	.30	.40	.70

SOLDERING SALTS

		½ Lb.	1 Lb.
Burnley	In cans each	\$.40	\$.75
Eaco	" " "	.80	1.50
Yeager	" " "	.70	1.00
McGill Crescent	" " "	.70	1.00
Nokorode	In cans each		.75
Allen	In Bottles each	.60	1.00



A NEW VIEW OF LIGHT

proving the importance of

BALANCED LIGHTING

LIGHT is no longer looked upon as an indefinite quantity that comes rather vaguely out of a lamp when we push a button.

We are making a lighting fixture answer a great many scientific questions accurately today. It must tell us, what is its lighting value at any given level and at any given distance. It must reveal the exact shape of its light. It must plot its curve. It must tell whether or no, in any certain case, it will waste the eyesight, the nervous force and the efficiency of our workers.



The Shelcrest, a Bakelite fixture. The leader in the Graybar line. But only one of a great many fixtures.

FOR BALANCED LIGHTING, WEIGH:			
Horizontal Light	vs.	Reflected Glare	
Vertical Light	vs.	Direct Glare	
Shadow Depths	vs.	Flat Shadows	
Maintenance & Design	vs.	First Cost	



Showing how various factors balance, for best results

All of which brings us to Balanced Lighting. And to the eight points which determine Balanced Lighting. And to the idea of the Graybar Lighting Line.

No one fixture will check up perfectly on all eight points. No one fixture could ever hope to, or should. But the Graybar Line includes just the right fixture for any given purpose—a unique Graybar idea.

More information on the eight points? See the coupon below!

GraybaR GraybaR
 Successor to *Western Electric* Supply Dept.
 BALANCED LIGHTING

COUPON

Graybar Electric Co., Room 1501, Graybar Building, Lexington Avenue and 43rd Street, New York, N. Y.

Gentlemen: We are interested in knowing more about BALANCED LIGHTING.

NAME..... ADDRESS.....

CI

Another Step Toward Standardization



No. 5892
3 Pole
Meter Attached Ready
for Wiring
List Ea. \$2.62

Three Switches In One

2 and 3 Pole

Single Fusing

30 A.—125 V.

1—For use with Standardized Meters
(No special Meter Trims required).
Remove inner twistout in top end to accommodate new
standardized 5-15 Amp. Meters.

2—For use with Special Meter Trims as used in Cincinnati.
Reverse top end (remove two screws) and remove outer
twistout to accommodate trims which slide into place.

3—Not used with Meters.
Conduit knockouts are provided in top end as well as in
other faces and back of box.



No. 5891
2 Pole
List Ea. \$2.00

STANDARDIZATION

The fact that Meter Manufacturers have standardized on the size of meter terminal chambers enables us to offer one type of switch for several uses.

This type of switch, made both in 2 and 3 Poles, will accommodate the new 5-15 Amp. Meters of all manufacturers without the use of additional meter trimming devices. However, in certain localities where certain types of meter trims are specified, as in Cincinnati, this switch will fill the bill as explained above.

This switch also as it stands without removing twistouts fills the bill for either a 2 or 3 Pole Entrance Switch for which every contractor knows many applications.

**THESE TWO SWITCHES SHOULD BE CARRIED
IN STOCK BY EVERY CONTRACTOR**

THE TRUMBULL ELECTRIC MFG. CO.

Plainville, Conn.

Branch Panelboard and Switchboard Factory at Ludlow, Ky.

NEW YORK
114 Liberty St.

BOSTON
1002 Statler Bldg.

PHILADELPHIA
Bourse Bldg.

ATLANTA

CHICAGO
2001 W. Pershing Road
SAN FRANCISCO
595 Mission St.



RELIABILITY

Because

HIGH quality in product and complete service to our customers is the foundation upon which Crescent's reputation for reliability has been built.

To maintain the quality standard, Crescent wire products are under constant and close observation, in all processes of manufacture.

PRODUCTS

"Crescent" National Electric Code Rubber Covered Wire and Cable.

Intermediate Grade Rubber Covered Wire and Cable.

"Imperial" 30% Rubber Covered Wire and Cable.

"Crescent" Lead Encased Wire and Cable.

"Crescent" Armored Cable.

"Crescent" Lead Covered Armored Cable.

"Crescent" Flexible Metallic Conduit.

Lamp, Heater, Brewery, Canvasite and Packinghouse Cords; Plain Rubber Sheathed and Braided Portable Cords; Elevator Lighting, Control and Annunciator Cables; Borderlight and Stage Cables; Dampproof Office and Annunciator Wires and Cables; Special Flexible Cords, Cordage and Cables for Telephone Instruments and Radio; Magnet Wires—cotton and silk covered; Organ Wire and Cable; Bare and tinned copper wire and cables.



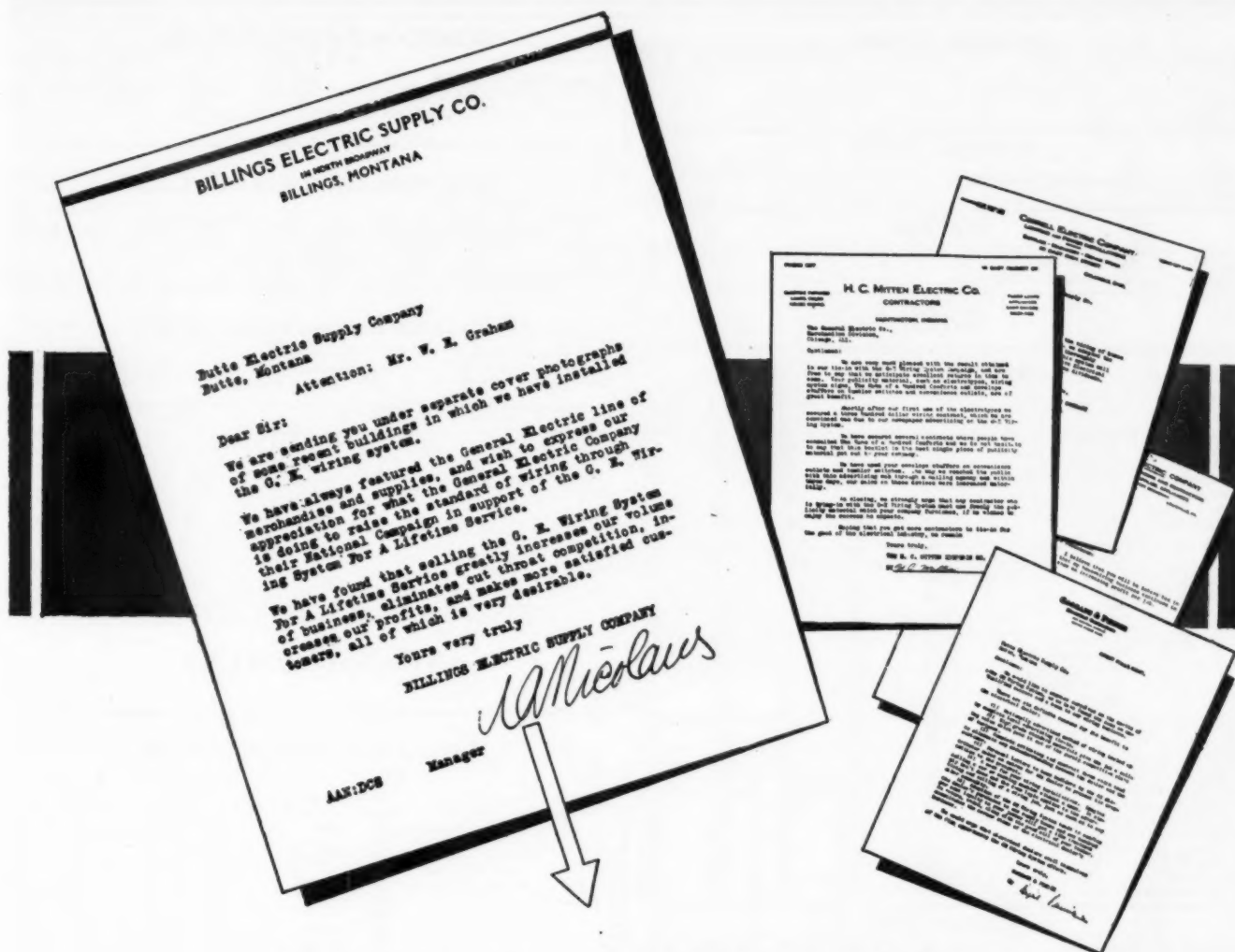
CRESCENT

Insulated Wire and Cable Co.

CRESCENT ARMORED WIRE CO.

TRENTON N. J.

Forty Years of Knowing How in Every Crescent Product



- ... increases our volume of business
- ... eliminates cut-throat competition
- ... *increases our profits*
- ... makes more satisfied customers



This is a helpful little booklet. Just drop us a card and get your copy.

THESE are four vital benefits which one electrical contractor attributes to the General Electric Wiring System. His letter, reproduced above, is one of many which bring us the gratifying news that the General Electric Wiring

System is building profits for contractors.

This year national advertising will be carried on through an even greater program. Sales help will be better than ever. More and more people will demand this *known* wiring and will be ready to pay a better price for it. Get further information... and profitable information... by writing to Section W-223.

GENERAL ELECTRIC WIRING SYSTEM

MERCHANDISE DEPARTMENT • GENERAL ELECTRIC COMPANY • BRIDGEPORT, CONNECTICUT

SOLDER STICKS

	Price
Burnley	\$.20
Eaco .....	.25
Samson .....	.25
Allen .....	.35
Crescent .....	.20

FIXTURE STUDS

Four Prong Fixture Studs Less Bolts	$\frac{3}{4}$ \$.10
Bolts Extra	$\frac{1}{4}$.01

STAPLES

Staples Insulated Nails Per Dozen	\$.05
Leather Nail Heads Per Dozen .....	.05
Milonite Insulated Nails Per Dozen .....	.05

TAPE

FRICTION TAPE

	Per Pound	Per Half Pound	Per 2 Ounce	Per 1 Ounce	Per Foot
Amazon Friction	\$.60	\$.30	\$.10	\$.05	\$.01
Adhere .....	.65	.35	.10	.05	.01
Bulldog .....	.70	.40	.10	.05	.01
Catact .....	.55	.30	.10	.05	.01
Commodity .....	.55	.30	.10	.05	.01
Dutch Brand .....	.65	.35	.10	.05	.01
Everstick .....	.55	.30	.10	.05	.01
Eaco .....	.95	.50	.15	.10	.02
G. E. .....	.55	.30	.10	.05	.01
Grimeshaw	1.95	1.00	.20	.10	.02
Holdfast	1.00	.55	.15	.10	.01
Holdtite .....	.75	.35	.10	.05	.01
I X L .....	.65	.35	.10	.05	.01
Illinois .....	.55	.30	.10	.05	.01
Johns Manville Armature	1.75	.90	.20	.10	.02
" " Jomanco	1.15	.60	.15	.10	.02
" " White	1.35	.70	.20	.10	.02
" " No. 3 Now No. 5 .....	.75	.40	.10	.05	.01
" " No. 6 " " 40 .....	.60	.30	.10	.05	.01
Jaxon .....	.60	.30	.10	.05	.01
Leader .....	.70	.35	.10	.05	.01
Manson	1.20	.65	.20	.10	.02
Magnet .....	.75	.40	.10	.05	.01
O. K. .....	.60	.30	.10	.05	.01
P & B	1.00	.55	.15	.10	.02
Peerless .....	.60	.35	.10	.05	.01
Service .....	.90	.50	.15	.10	.02
Stanpat .....	.55	.30	.10	.05	.01
Sticka .....	.55	.30	.10	.05	.01
Victor W. E. .....	.55	.30	.10	.05	.01
Vim Gray	1.10	.60	.15	.10	.02
W. E. Railway Signal	1.00	.45	.15	.10	.02

RUBBER TAPE

	Per Pound	Per Half Pound	Per 2 Ounce	Per 1 Ounce	Per Foot
Amazon Rubber	\$.95	\$.45	\$.15	\$.10	\$.04
Alexall	1.20	.65	.15	.10	.04
Alpha	1.15	.60	.15	.10	.04
Brooklyn .....	.70	.35	.10	.05	.03
Catact .....	.70	.40	.10	.05	.03
Dutch Brand .....	.70	.35	.10	.05	.03
Eleco .....	.60	.30	.10	.05	.03
G. E. .....	.60	.35	.10	.05	.03
Holdfast	1.00	.60	.15	.10	.04
Imperial .....	.65	.35	.10	.05	.03
Illinois .....	.60	.35	.10	.05	.03
Okonite	1.55	.80	.20	.10	.04
Para .....	.75	.40	.10	.05	.03
Pittsburgh .....	.70	.35	.10	.05	.03
Relio .....	.65	.30	.10	.05	.03
Security .....	.55	.30	.10	.05	.03
U. S. Rubber .....	.65	.35	.10	.05	.03
W. E. Victor .....	.55	.30	.10	.05	.03

TIME SWITCHES

BUCKEYE TIME SWITCHES

	Without Term. Box	With Term. Box
110 or 220 V.-Sgle or Dble Pole-10 A	\$19.50	\$28.00
" " " " " " " " 20 A	23.00	30.00
" " " " " " " " 30 A	26.00	32.00
" " " " " " " " 50 A	30.00	36.00
Specials	26.00	30.00
Buckeye Combination Time Switch Remote Control Unit Complete		\$ 70.00
AC Capacity up to 125A.-110 or 220 Volt-2 & 3 Wire		125.00
DC		

HARTFORD TIME SWITCHES

	10 Amp.	20 Amp.	35 Amp.	50 Amp.
Type B Single or Double Pole	\$36.00	\$39.00	\$42.00	\$50.00
Type B Triple Pole	38.00	41.00	45.00	...
Type C & D Single or Double Pole	39.00	42.00	47.00	52.00
Type C & D Triple Pole	41.00	45.00	49.00	...
Type G Apt. Hall Light Control D.P.	38.00	...	60.00	...

PARAGON TIME SWITCHES

Indoor	All 250 Volt	Outdoor
No. 1—\$47.00	30 Amp. Double Pole	No. 2—\$47.00
No. 1—59.00	50 " " "	No. 2—59.00
No. 1—59.00	30 " Triple " "	No. 2—59.00
No. 3—45.00	20 " Double " "	No. 4—45.00
No. 3—40.00	10 " " " "	No. 4—40.00
No. 3—45.00	10 " Triple " "	No. 4—45.00
Sunday Shut Off—Extra		\$5.00
Attachment for Turning on earlier		5.00

RELIANCE & RACINE SWITCHES

	10 Amp.	20 Amp.	30 Amp.	50 Amp.
Racine Type 1R-2R-3R	\$19.50	\$23.00	...	...
Reliance Type 10-20-30-50	25.00	30.00	\$32.00	\$36.00
Reliance Type 15 Triple Pole .....	...	32.00	...	...

TORK TIME SWITCHES OR CLOCKS

Description	Indoor	Outdoor	Switchboard
Single Pole 15 Amp. 125 Volt	#115—\$20.00	#215—\$25.00	#015—\$19.00
Double " 30 " 250 "	#130—25.00	#230—30.00	...
Single " Double Throw	#166—25.00	...	...
Double " Momentary Contact	#111—25.00	...	...
Dble. Pole 30 A. 250 V. Windless	#730—60.00	#830—65.00	#930—58.00

Combination Type—with Clock and Contactor

For AC Only	Description	For DC Only
No. 76062 \$50.00	60 Amps. 2 Pole	No. 75062 \$ 70.00
No. 76102 75.00	100 " 2 Pole	No. 75102 125.00

ZENITH

Description	Closed Face No. 110	Open Face No. 134	Windless AC
10 Amp. Double Pole	\$20.00	\$26.00	\$ 25.00
20 " " "	23.00	28.00	...
30 " " "	25.00	30.00	40.00
60 " " " .....	...	...	55.50
100 " " " .....	...	...	77.50
200 " " " .....	...	...	110.00
Apartment House	26.00	30.00	...

TRANSFORMERS

BELL & TOY TRANSFORMERS

Name	Style	Watt	Secondary Volts	No.	Price	25 to 40 Cycle	No.	Price
Steel Clad Bell	25	Single	86	\$ 1.30				
Porcelain Bell	25	Three	86T	1.55				
Out. Box Bell	25	Single	87	1.55				
Heavy Duty	50	8-16-24	86ER	1.55				
" " "	75	"	88	4.60				
" " "	100	"	89	6.95				
Toy	50	3 to 15	90	8.10				
" " "	75	3 to 24	870	3.85				
" " "	100	2 to 30	871	6.35				
" " "	100	2 to 30	872	9.50				

G. E.	Bell Residence	12 Volt	2332	1.30	192340	1.50
"	Box Type	12 " "	2488	1.45	2490	1.60
"	Heavy Duty	50 8-16-24	2333	5.10	2339	7.10
"	"	100 10-20-30	2334	8.05	2340	11.20

HEMCO	Mold. Single	25 8 Volts	221	1.50		
"	Mold. 3 Circuit	25 6 to 18V.	222	2.00		
"	Steel Sgle. Cir.	25 8 Volts	225	1.45		
"	Steel 3 Circuit	25 6 to 18V.	226	1.65		
"	Box Type Sgle. Cir.	25 8 Volts	227	1.50		
"	Box Type 3 Cir.	25 6 to 18V.	228	2.00		

Wizard	25	10 Volt	230-101	1.30	230-102	1.50
Nacode	25	11 Volt	230-111	1.45	230-112	1.65
Tri-Volt	25	6 to 18V.	230-121	1.45	230-122	1.65
Porcelain			230-131	1.45		
Little Jeff Toy	50	5 1/2-13	535-101	3.65	535-102	4.30
Midjet Toy	75	5 1/2-22	535-121	4.50	535-122	5.40
Model 2 Toy	100	5 1/2-23	535-131	6.65	535-132	8.25
Model 3 Toy	150	1-30	535-141	8.55		
Heavy Duty A	50	6 to 20	231-101	5.00	231-102	7.10
" " B	75	6 to 20	231-111	7.60	231-112	10.10
" " C	125	6 to 24	231-121	10.15	231-122	12.80
" " E	250	6 to 24	231-141	20.80	231-142	25.65

KILLARK	Blue Bell	10 8 Volt	6166	1.25		
"	Tri-Volt	20 6 to 16	6163	1.45	6126	1.40
"	Box Type	10 8 Volt	7166	1.45		
"	Porcelain Case	10 8 Volt	4166	1.45		

RITTENHOUSE	A Single Volt	25 8 Volt	A-1	1.30	A-1	1.50
"	A Three " "	25 6 to 14	A-13	1.55	A-13	1.75
"	B " "	50 6 to 14	B-1	4.10	B-1	4.50
"	C " "	75 8 to 24	C-1	6.00	C-1	6.75
"	D " "	125 15 to 40	D-1	9.75	D-1	12.00
"	Porcelain	25 8	AP-1	1.45	AP-1	1.75
"	Box Type	25 8	OB-1	1.50	OB-1	1.75
"	Toy 1-Junior	50	No. 1	3.75		
"	" 2-Senior	100	No. 2	6.25		
"	" 3-Niagara	150	No. 3	9.50		

STANLEY	S-1 Sgle. Volt	15	S-1	1.30		
"	S-3 3 Volt	15	S-3	1.40		
"	D-1 Sgle. Volt	25	D-1	1.50		
"	D-3 3 Volt	25	D-3	1.70		
PATERSON	HD-1 3 Volt	50	HD-1	5.35		
"	EHD 3	100	EHD-1	6.65		
"	"	200		18.00		
"	"	300		21.00		

NOTE: For 220 Volt Transformers add 20% to above prices.

Wires

Wires & Cables

WIRES

RUBBER COVERED WIRES

Special Price on No. 14 S.B. Wire

In less than Coil Lots	In Coil Lots	Other Sizes	Price Per Foot			
			No. 18	No. 16	No. 14	No. 12
Fixture Wire Light			\$.01	\$.01½		
" Heavy			.01½	.01½		
Solid Single Braid			.01	.01½	See Above	
" Double			.01½	.01½	.02	
Stranded Sgle. Braid			.01½	.01½	.02	
" Dble. "					.02½	
Duplex Single Braid					.04	
" Double					.04½	
Other Sizes						
Fixture Wire Light			No. 12	No. 10	No. 8	No. 6
" Heavy						
Solid Single Braid			\$.02	\$.02½	\$.04	\$.06½
" Double			.02½	.03½	.04½	.06½
Stranded Sgle. Braid			.02½	.03½	.04½	.06½
" Dble. "			.02½	.03½	.05	.06½
Duplex Single Braid			.05	.06	.08½	
" Double			.05½	.07	.09	

LARGER SIZES DOUBLE BRAID STRANDED

Size	Price Per Foot
No. 8 D. B.	\$.05
No. 6 D. B.	.06½
No. 4 D. B.	.09
No. 3 D. B.	.11
No. 2 D. B.	.12
No. 1 D. B.	.17
No. 0	.20
No. 00	.24
No. 000	.29
No. 0000	.35

CIRCULAR MILL CABLE

Size	Price Per Foot
250,000 C. M.	\$.43
300,000 C. M.	.50
350,000 C. M.	.58
400,000 C. M.	.63
450,000 C. M.	.71
500,000 C. M.	.76
600,000 C. M.	.94
700,000 C. M.	1.07
750,000 C. M.	1.16
800,000 C. M.	1.22
900,000 C. M.	1.41
1,000,000 C. M.	1.53

WEATHERPROOF WIRE

Triple Braid

	No. 18	No. 16	No. 14	No. 12	No. 10	No. 8	No. 6
Per Pound Solid	\$.64	\$.60	\$.56	\$.53	\$.49	\$.46	\$.43
" Stranded				.62	.53	.47	
Per Foot Solid	.01	.01½	.01½	.02	.03	.03½	
" Stranded	.01½	.01½	.01½	.02½	.03½	.04	
Number Feet Per Pound	90	70	40	30	20	13	

EXTRAS—For slow burning W. P. Wire—Per Pound Extra..... \$.01
 For Twisted Pair W. P. Wire—Per Pound Extra..... .02
 For Double Braid W. P. Wire—Per Pound Extra..... .01
 For Medium Hard Drawn—Per Pound Extra..... .00½

For Armored Cables See Page PL-9.

WIRES, SUNDRY

ANNUNCIATOR—TELEPHONE, ETC.

Fixture Wire	Description	Per Foot	No. 18	No. 16
			\$.01	\$.01½
Annunciator Wire	Solid Light ¼"		.01½	.01½
	" Heavy ¼"		.01½	.01½
	" Stranded Light ¼"		.01½	.01½
Office & Damp Proof Wire	Single	Per Pound	.60	.60
	"	Per Foot	.00½	.00½
	Twisted or Duplex	Per Pound	.70	.65
"Deltabeston" or similar	Single	Per Pound	.80	.75
	"	Per Foot	.01	.01½
	Twisted or Duplex	Per Pound	.85	.80
(Nitrogen)	Single	Per Pound	.02	.02½
	"	Per Foot		
	Twisted or Duplex	Per Pound	.03	.03½
	Single Stranded Black	Per Foot	.04	.04
	Single Stranded Colored	Per Foot	.04	.04
	Single Glazed Cotton	Per Foot	.04½	.05
	Duplex Artificial Silk	Per Foot	.08	.09
	Duplex Glazed Cotton	Per Foot	.09	.10
	Duplex Artificial Silk	Per Foot	.08	.09
	Twisted Pair Glazed Cotton	Per Foot	.08	.09
	Twisted Pair Artificial Silk	Per Foot	.09	.10

March, 1929

ANNUNCIATOR—TELEPHONE, ETC.—Continued

Asbestos Range Wire	Description	Per Foot	No. 18	No. 16
			\$.06	\$.07
Annunciator Wire	Single	Per Pound	.65	.65
	"	Per Foot	.01	.01
	Twisted or Duplex	Per Pound	.60	.60
Office & Damp Proof Wire	Single	Per Pound	.70	.70
	"	Per Foot	.01½	.01½
	Twisted or Duplex	Per Pound	.75	.75
	Single	Per Pound	.04	.05
	"	Per Foot	.05	.06
	Single Glazed Cotton	Per Foot	.05	.07
"Deltabeston" or similar	Single Artificial Silk	Per Foot	.05½	.08
	Duplex Glazed Cotton	Per Foot	.10	
	Duplex Artificial Silk	Per Foot	.11	
(Nitrogen)	Twisted Pair Glazed Cotton	Per Foot	.10	
	Twisted Pair Artificial Silk	Per Foot	.11	
Asbestos Range Wire	Asbestos Range Wire or Switch Board Wire	Per Foot	.08	.09

COVERED TELEPHONE WIRES

	No. 22	No. 20	No. 19	No. 18	No. 17	No. 16	No. 14
Inside Phone Wire Per Ft.	\$.03	\$.03	\$.03	\$.04	\$.04	\$.05	\$.06
Outside " " "	.03	.03	.03	.03½	.03½	.04	.05

GALVANIZED TELEPHONE WIRE

Size BWG		No. 4	No. 6	No. 8	No. 10	No. 12	No. 14
EBB Extra Best	Per Pound...	\$.13	\$.13	\$.13	\$.13	\$.14	\$.15
B. B. Best Best	" " " "	.12	.12	.12	.12	.13	.14
Steel	" " " "	.11	.11	.11	.11	.12	.13
Weight Per 1000 Feet.....		153	112	74	49	32	10
Weight Per Mile.....		811	590	390	258	170	99

WIRE, MAGNET

Price Per Pound

Size	Single Cotton	Double Cotton	Single Silk	Double Silk	Enamel-ed Cotton	Enamel-ed Single Cotton	Enamel-ed Double Cotton
6	\$.72	\$.74					
8	.74	.76					
10	.75	.80			.73	.80	.83
12	.77	.83			.75	.82	.86
14	.80	.85			.78	.86	.93
16	.82	.90	1.15	1.35	.80	.89	.97
18	.85	.95	1.20	1.55	.83	.95	1.05
20	.90	1.10	1.25	1.65	.85	1.05	1.15
22	.97	1.20	1.40	1.85	.87	1.15	1.25
24	1.10	1.35	1.60	2.25	.93	1.25	1.45
26	1.25	1.65	1.90	2.65	1.10	1.45	1.85
28	1.50	2.10	2.25	3.20	1.15	1.70	2.35
30	1.85	2.60	2.75	4.10	1.20	2.10	2.80
32	2.30	3.40	3.65	5.50	1.35	2.70	3.75
34	3.00	4.00	4.70	7.50	1.55	3.40	4.75
36	4.00	5.25	6.20	10.00	2.00	4.75	5.75
38	5.75	8.00	8.90	15.10	2.25	5.55	9.25
40	8.00	11.50	13.30	20.50	4.10	9.00	13.10

NOTE: For odd sizes use half the increase of next larger size.

For ¼ lb. lots use one third of above prices.

For one ounce lots use one tenth of above prices.

Price Per 100 Feet

Size	Single Cotton	Double Cotton	Single Silk	Double Silk	Enamel-ed Cotton	Enamel-ed Single Cotton	Enamel-ed Double Cotton
6	\$6.00	\$6.10					
8	3.70	3.90					
10	2.80	2.90			\$2.45	\$2.90	\$3.10
12	1.85	1.90			1.65	1.85	2.00
14	1.25	1.30			1.05	1.20	1.35
16	1.00	1.10	\$1.20	\$1.35	.85	1.00	1.20
18	.75	.80	.90	1.00	.65	.80	1.00
20	.65	.70	.75	.80	.55	.70	.90
22	.40	.45	.50	.55	.35	.50	.70
24	.35	.40	.45	.50	.30	.40	.60
26	.25	.30	.35	.40	.20	.25	.35
28	.20	.25	.30	.35	.18	.23	.30
30	.15	.20	.25	.30	.15	.20	.25
32	.12	.15	.20	.25	.12	.15	.20
34	.10	.12	.15	.20	.09	.10	.15
36	.10	.12	.15	.20	.09	.10	.15
38	.10	.12	.15	.20	.09	.10	.15
40	.10	.12	.15	.20	.09	.10	.15

Note: Prices per 100 feet are higher than per pound rate to cover cost of measuring and should be used only for small lot sales.

WIRES & CABLES
LEAD COVERED & PARK CABLE

LEAD & RUBBER COVERED

Size	Price Per Foot	Single Conductor	Stranded
No. 16		\$.04½	\$.05
No. 14	"	.05½	.06½
No. 12	"	.06	.07
No. 10	"	.08½	.10
No. 8	"	.10	.11
No. 6	"	.15	.17
No. 4	"		.20
No. 3	"		.24
No. 2	"		.30
No. 1	"		.35
No. 1/0	"		.40
No. 2/0	"		.44
No. 3/0	"		.52
No. 4/0	"		.60

95

LEAD & RUBBER COVERED—Continued

250,000 C. M. Cable.....	.75
300,000 C. M. ".....	.85
350,000 C. M. ".....	.95
400,000 C. M. ".....	1.05
500,000 C. M. ".....	1.25
600,000 C. M. ".....	1.55
700,000 C. M. ".....	1.75
750,000 C. M. ".....	1.82
800,000 C. M. ".....	1.93
900,000 C. M. ".....	2.12
1,000,000 C. M. ".....	2.28

NOTE: Above prices are based on following quantities:
No. 16 to No. 8 Less than 100 ft.
No. 6 and larger less than 50 ft.

Size	Price Per Foot	Duplex		Three (3) Conductor	
		Solid	Stranded	Solid	Stranded
No. 16		\$.06		\$.14	
No. 14		.08	.10	.17	.18
No. 12		.12	.14	.20	.23
No. 10		.14	.16	.27	.30
No. 8		.17	.19	.32	.35
No. 6		.28	.31	.48	.53

No. 4		.40	.67
No. 2		.52	.87
No. 1		.68	1.25
No. 1/0		.79	1.32
No. 2/0		.92	1.52
No. 3/0		1.05	1.68
No. 4/0		1.28	2.15

NOTE: Above prices are based on following quantities:
No. 16 to No. 8 Less than 100 ft.
No. 6 and larger less than 50 ft.

**STEEL TAPED PARK CABLE
600 V. only**

Size	1 Cond.	2 Cond.	3 Cond.
No. 12 Solid.....	\$.15	\$.22	\$.33
No. 10 ".....	.18	.25	.37
No. 8 ".....	.20	.28	.43
No. 6 Stranded.....	.27	.38	.53
No. 4 ".....	.32	.46	.71

NOTE: Above prices are based on quantities of 100 to 249 feet—Prices on smaller quantities are higher.
Prices on Park Cable above 600 V. are higher.

A Word to the User

The original compilation of the foregoing prices represents almost three years of research and study by pricing experts. In the selection of the thousands of items to be priced, and the assignment of the resale prices that would be generally applicable, they were aided by an intimate knowledge of the contracting business, as well as the co-operation of jobbers located in all the important jobbing centers of the country.

Before publication of these prices as you find them in this issue, which prices, by the way, will be completely revised each month as changing conditions demand, they were put to actual test in various parts of the country and their practicability as a convenient, generally effective pricing system for the contractor proven beyond a doubt.

Nevertheless, all should understand that this is a universal pricing guide for use in all sections of the country. It must, therefore, cover average conditions. Furthermore, it is a system to be used by all contractors—those operating with low, medium and high overhead costs. These variables are all taken into consideration and the prices will be found in line generally with conditions surrounding the average contracting business wherever located. In handling the variables, an effort has been made to lean more toward a larger profit for the contractor than toward the other extreme. Any contractor, in any part of the country, even with a high overhead, may safely feel that he is going to derive some profit through the use of the system, and, of course, those operating under more favorable conditions will derive a considerably higher profit.

When all is said and done, however, this, or any other universal pricing system cannot take the place of common sense. Where conditions are peculiar, a contractor may find that some variance from these average prices is necessary, but even in that case, the system here placed at his disposal represents a working basis to which he may apply such factors as meet his particular requirements.

Chrysler Uses Wheeler Lighting



WHEELER DUREX
for general lighting



WHEELER ISOLUX
for side lighting

"Wheeler lighting is scientifically correct"
WHEELER REFLECTOR CO.

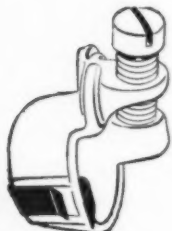
275 Congress St., Boston, Mass.
New York Atlanta Cleveland



Sales Offices: St. Louis, Indianapolis, Los Angeles,
San Francisco, Seattle
In Canada: Canadian General Electric Co., Limited

IT IS only natural that Chrysler engineers, famous for their production efficiency, should standardize on Wheeler lighting equipment. They knew it to be scientifically correct; they realized the saving it would allow them in installation and maintenance costs; and they appreciated the advanced patented features which only Wheeler offers, and which characterizes the continued modern lighting developments bearing the Wheeler name. Your plant too, can know the advantages of the best in illumination, if Wheeler-equipped. A representative from our nearest office will gladly go over the matter with you, without obligation.

RATTAN SLIP-IN CONNECTOR



$\frac{3}{8}$ " 112-S

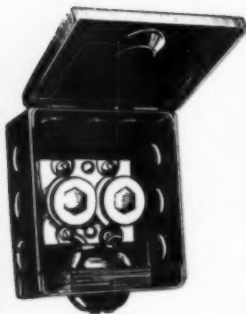
with the
SNAP-IN SPRING

"It Stays Put"

Use the Coupon for Sample and Catalog

THE RATTAN MANUFACTURING CO.

New Haven, Conn.



**ADDITIONAL
PROTECTION**
with
**RITTENHOUSE
TYPE H and HP
Transformers**

These types are of 25 Watt capacity with 110 volt primary and 8 volt secondary. The transformer and porcelain cutout are mounted in a small metal box of standard gauge.

This arrangement makes possible the fusing of the transformer, definitely safeguarding the user against accident. Type H furnished with double pole cutout. Type HP furnished with single pole cutout.

A. E. RITTENHOUSE CO.
HONEOYE FALLS, N. Y.



CLIFDUCT
working smoother
and easier than ever



THE RACEWAY OF PROGRESS
CLIFTON
Cuts Cleaner Threads Easier

General Sales Agents

HATHEWAY & COMPANY INC

225 Varick Street

A general sales organization—Representing nationally:
☐ The Rattan Manufacturing Co. ☐ Clifton Conduit Co.
☐ A. E. Rittenhouse Co. ☐ E. J. Klous Electric Co.

Gentlemen:

Please send complete information on companies checked.

Name

Street

City

New York City

State

City

State

To Test Appliances for Quality

An appliance testing project for the purpose of determining the quality of electric appliances is being undertaken by the Electrical Testing Laboratories of New York under the auspices of the Association of Edison Illuminating Companies.

No approval or approval label service is contemplated at present. Nor are formal specifications contemplated, in the earlier stages of the movement at least. The intent is to seek facts first and to develop later the most constructive applications of such facts.

The method to be employed consists essentially in: Surveys of qualities and performance characteristics of electrical equipment; constructive application, as may prove practicable, of the facts revealed by such surveys; communication of results to central station companies; ultimately, grading of brands as to qualities and performance for the guidance of the industry.



The world's work reduced to easy plugging

Nowadays much of life's hard plugging has been reduced to simply pushing a plug into a convenient electrical outlet.

But if you are to get the full benefit of electricity's wonder-working power, you must do your part by providing an adequate wiring system.

That's where an Electragist can help. Just be sure to let an Electragist plan and install the job—and rest assured that work, materials, and price will be right!

CHAPTER

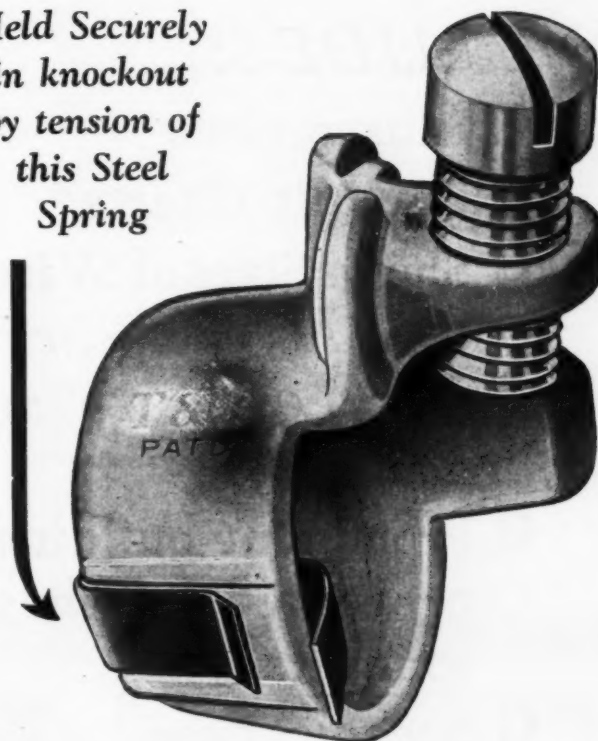
Association of Electragists
International
Street



ELECTRAGIST ADVERTISING:—
The series of advertisements which have been appearing in the Baltimore, Md., papers featuring the "Electragist" idea, have been reproduced by the A. E. I. in booklet form. Electros are available to all local chapters which contemplate such a program.

The NEW SPRING TYPE SNAP IN 3/8" Box Connector

Held Securely
in knockout
by tension of
this Steel
Spring



DESIGNED for connecting No. 14W2, 14W3 and 14-C, 14-P Cord with the following advantages:

Makes a Perfect Ground.

Cannot fall out.

Comes assembled and ready to use.

Saves Time and Money.

Send for Sample, prices and our Complete Catalog on Steel City Fittings



STEEL CITY ELECTRIC CO.
PITTSBURGH, PA.



=FREE=

To Contractors A New Booklet on Rigid Conduit

INCLUDES:

- Q Illustrations
- Q Conduit Charts
- Q Shows Sizes of Wires
- Q How "GALVADUCT"
and "LORICATED" are
made.
- Q Prominent buildings
protected by these
conduits.
- Q Specifications

You Need this Booklet
Fill in this Coupon and Mail it Today

---**GARLAND MFG. CO.**---
PITTSBURGH, PA.

*Please Send a Copy of "PROTECTION
AND SERVICE FOR OVER 30 YEARS"*

To Mr.

Firm Name

Address

City State

(E.C.)

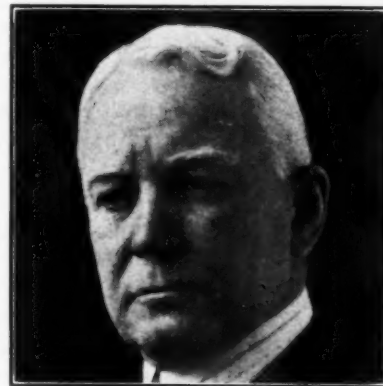
Improper Wiring Brings Fine

An electrician of Paterson, N. J., was fined \$20 in the Recorder's Court on February 14 for improperly installing electrical fixtures in a house. Chief Electrical Inspector Ward prosecuted the case.

* * *

Chicago Contractors Adopt Credit Plan

At the last regular meeting of the Electrical Contractors' Association of Chicago the Detroit Credit



William McGuineas, President Electrical Contractors' Association of Chicago.

Plan was adopted. James E. Vaughan, Jr., of the National Association of Credit Men, is working out the details of putting the plan into effect in Chicago.

The association is now 100 percent Electragists and is completing arrangements for affiliation with the Association of Electragists as a chapter.

On February 9 the association gave its annual installation dinner dance at which practically every member of the association attended together with the guests from every branch of the industry. One of the unique features of the attendance was all of the young ladies who have served the association as assistant secretaries during the past eighteen years. They were namely: Mrs. J. W. Collins, Mrs. Albert Meyer, Mrs. J. T. O'Brien and Miss E. O'Kelly, the present assistant.

The 1929 officers are: William McGuineas, president; J. W. Collins, secretary; J. O. Kelso, treasurer; O. F. Burnett, assistant treasurer; T. J. Costello, R. F. McMillan, J. N. Pierce and W. A. Jackson, members of the executive committee.

"USE A KONDU, INSTEAD OF A THREAD"

What the Newer Knowledge of Wiring has shown—

The Economy of the One Threadless Fitting that can be Taken Out of the Line Alone

Watch a line of conduit being put in with KONDU Threadless Fittings, and you understand at once why modern wiring experts, one after another, have adopted KONDU as standard.

Note how easily KONDU goes *anywhere*—slipping over the ends of bent conduit as easily as straight—close to corners, girders, and partitions, as easily as in the open.

Three or four turns of the lock-nuts, and KONDU is in to stay put. Vibration can't shake it loose. Accidents can't break these fittings, which are malleable iron.

The easiest fittings to change

When you have alterations or additions to

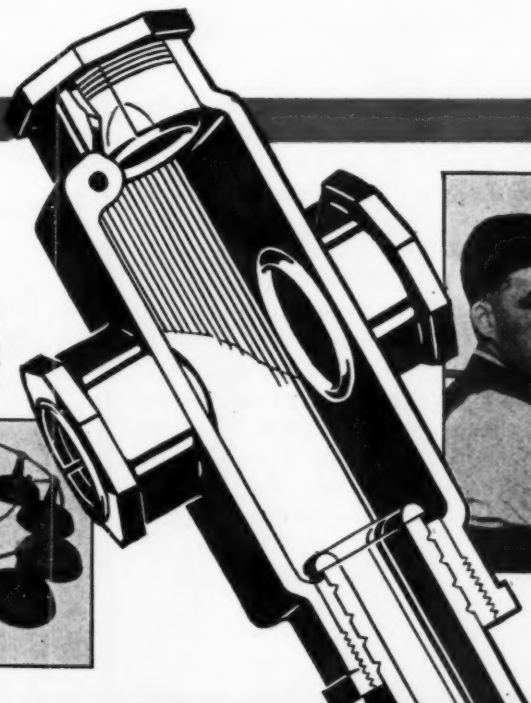
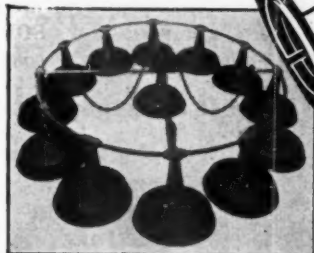
make, KONDU fittings can be taken from the line as easily as they are put in—without disturbing any other part of the system. Did you ever see any other fitting that will do this? Neither did we.

And of course there's no time spent threading pipe—no unions to turn into the pipe after a bend. KONDU made all that unnecessary 3 years ago!

Write for the KONDU Catalog, showing the complete line of threadless fittings for every standard electrical requirement.

ERIE MALLEABLE IRON COMPANY
Kondur Division Erie, Pa.

Any unusual or tricky conduit installations are handled easily with KONDU Threadless Fittings—this one was for lighting a boxing arena.



See how easily the KONDU fitting slips into or out of the line—without disturbing any conduit.

**FIRST IN THE FIELD
OF
THREADLESS
FITTINGS**

KONDU

**CAN BE TAKEN
OUT OF THE LINE
ANYWHERE,
AT ANY TIME**



"No more dead motors around here, Jack"

"A MIGHTY handy little Kit." That's what motor repairmen say about the Ohio Carbon Kit No. 35. And no wonder—this kit will service over 300 different types of single phase motors, such as Westinghouse, C. E. Wagner, Century, Peerless, etc. Each type of brush is numbered and in separate compartments for immediate identification. By the aid of the chart one can quickly find the right brush for any job.

Send for this valuable kit direct, or order through your usual jobber.

Ohio Carbon Kit No. 35

Price \$25.00

THE OHIO CARBON CO.

8217 Almira Avenue
CLEVELAND, OHIO

West of the Rockies:
1066 Howard St., San Francisco, Calif.



Boston Contractors Hear Credit Plan

Electrical contractor members of the Metropolitan Electrical League of Boston met on February 14 to learn about the Detroit Credit Plan. The elements of the plan were discussed by E. G. Jay, manager of the league. A number of the Boston contractors are impressed with the Detroit Credit Plan as offering a solution to their problems and there seems to be every reason to believe that the plan will undoubtedly be tried out in that city within the near future.

* * *

May Regulate Unapproved Equipment

Electrical contractors of Olympia, Wash., are reported to be seeking legislation from the city commission regulating the sale of unapproved appliances and materials.

The contractors met on January 14 to hear H. A. Patten, of Seattle, chief electrical inspector for the State rating bureau, explain the changes in the new 1928 National Electrical Code.

* * *

Indianapolis Visits Louisville

On February 18, members of the Electric League of Indianapolis were guests of the Louisville Electric League, the entire day and evening being spent in a get-together session that was heartily enjoyed by all concerned.

Leaving Indianapolis at 7:00 A. M., the Indiana boys went to Louisville by bus. They were met by a police escort and conducted to the Kentucky Hotel. In the luncheon room they were met by Mayor William B. Harrison of Louisville and the directors of the Louisville Real Estate Board.

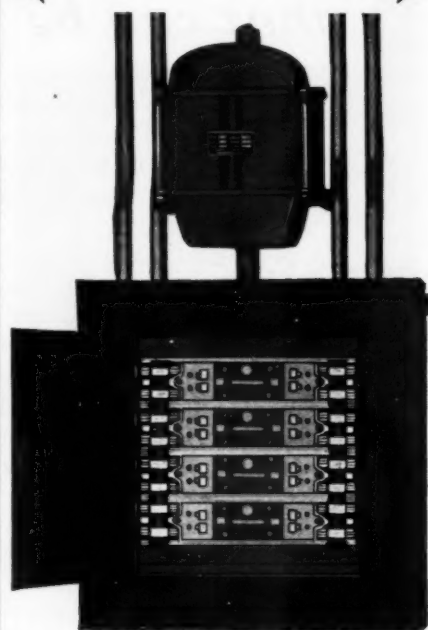
During the luncheon the assemblage was entertained by Henry Schilling's orchestra, with Ed Bingham of the Indianapolis League and other soloists singing several numbers. Naturally, "On the Banks of the Wabash" and "My Old Kentucky Home" were included in compliment to both hosts and guests.

Addresses were made by Roy

New Code **SORGEL** Air Cooled Transformers

With Conduit Connections

No Other Fittings Required



Made in sizes $\frac{1}{4}$ to 50 KVA.
Single phase, two phase and three phase

110-220-440 and 550 Volt

Meet all requirements of the New National Code

Can be Installed Easily, Quickly, Economically

and conveniently most anywhere inside of buildings. No fire-proof vaults are necessary. SORGEL Transformers are air-cooled—

No oil to worry about

TRANSFORMERS
DESIGNED FOR
SPECIAL
APPLICATIONS

Send for descriptive literature

Sorgel Electric Co.

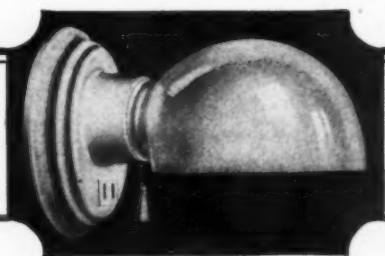
Clybourn & W. Water St.
Milwaukee, Wis.

COMING

... the 1929 Edition of the Electrical Trade Catalog ... containing the latest revised catalogs of more than a hundred manufacturers of electrical supplies and equipment for the contracting field ... bound together in a striking new binder... making this constantly needed volume a still handier buying reference!

McGraw-Hill Catalog and Directory Company, Inc.
New York





GUTH AGLITES

— a Type for Every Place and Purpose

Aglite is the ideal Lighting Fixture for Bedrooms, Bathrooms, Dressing Rooms and similar locations. It is permanently clean and sanitary. Its white or old ivory porcelain finish, baked on in three coats at a temperature of 1600 degrees, never peels nor discolors. It stays new.

No exposed metal; nothing to collect dust. All insulated parts concealed in the base. Many of the largest hotels and public buildings in the country have installed Aglites throughout. There is an unlimited market for these practical Fixtures. Dealers will find them preferred for quantity equipment orders.

A special folder describing and pricing the Guth Aglite will be sent on request.

The EDWIN F. GUTH COMPANY

2615 Washington Ave. St. Louis, Mo.

MAKERS OF THE WORLD-FAMOUS BRASCOLITE

Beating Competition with Brains

Competition is tough in the electrical contracting business these days; and every day it gets worse. Successful contractors have found they can beat fly-by-night competition best by using their brains, and by educating their responsible employees. You can help your head men to keep abreast of the times and save you money by sending each his own copy of ELECTRICAL CONTRACTING.

Thurman, president of the Indianapolis Electric League, and Ted C. Brown, secretary-manager. Following the luncheon the visitors were taken to inspect the new 80,000 KW Ohio Falls Hydro Station of the Louisville Hydro-Electric Co.

Returning to the hotel, the party got its second wind and repaired to the Pendennis Club for dinner. When that was over they attended the first Home Show ever held in Louisville. Leaving at 8:00 p. m., they arrived at Indianapolis at midnight.

* * *

Estimating Floodlighting

In the article by E. W. Wheeler in the February issue entitled "Rule of Thumb Method for Estimating Floodlighting," Example 1 on page 12 stated the district to be "brightly lighted." This was an error. It should have read "medium lighted district." Using the values for the latter condition the problem will work out as calculated.

* * *

No State Licensing for Montana

A bill providing for a State board of examiners for electrical contractors and licensing of electrical contractors of the State was killed by the Montana legislature in January.



SPECIALIZES IN POWER WORK:

—W. J. Squire, head of Squire Electric Co., Kansas City, Mo., makes a specialty of large industrial and power installations. His firm recently moved into larger quarters in the same building. This fine sub-station serves the Chevrolet and Fisher Body plants in Kansas City, Mo., jointly. It transforms a current of 13,200 volts to 440 volts, 3-phase, 60 cycles, which is carried underground to the buildings. There are six transformers, three 500-KW and three 200-KW. a total of 2100 KW.

*for economy, efficiency
and endurance,*

BENCO



*The Metal-Clad Weatherproof
Porcelain Socket*

For industrial or any other heavy duty use. Millions of Benco Sockets have been installed in every conceivable place where the endurance which defies the hardest kind of service is required. Where ordinary equipment would speedily break down, Benco Sockets will give unfailing service for years.



**Heavy Metal Case
Rugged Porcelain Insulation
Convenient Assembly**



In addition to their rugged strength, the convenience with which Benco Holders for shades and reflectors may be attached make Bencos the most popular general purpose sockets ever devised.



Send for full information on the many advantages of Benco Sockets, Threaded Holders and Outlet Box Fittings.

**"Benco"
Threaded Holders**



Benco Type S Holders provide an easy means for attaching

shades or reflectors to Benco Sockets and Outlet Box Fittings. Benjamin Porcelain Enameled Steel Reflectors are also furnished with "built in" Type S holders for convenient attachment to Benco Sockets.



Benjamin Electric Mfg. Co.

120-128 So. Sangamon Street

New York

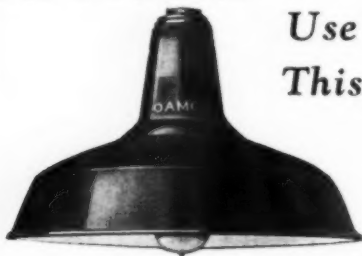
Chicago

San Francisco

Do the JOB with **OAMCO** REFLECTORS

Is it a Factory?

Satisfaction to your customer means that you must deliver light for safety and large production at low maintenance cost. You want to get the job done quickly, neatly, and make money on it. You will make good on all points if you—



Use
This

--or a Bank?

Accuracy in counting and figuring demands first, abundant soft light. Neat appearance is a close second. This bank reflector, over every teller's window and bookkeeper's desk satisfies both demands. On the next job you sell,

Use This



--or an Art Store?

Schools, museums, fine homes, department stores, all find uses for this picture light. It spreads a wide, soft glow that gives efficient reflection while making the whole picture, advertisement or display attractive. When you get such a job,

Use This



Send For Catalog

Full of selling ideas—every page suggests a place where you could dispose of OAMCO reflectors at profit. No charge; yours for the asking. Pull a postcard out of your desk and write your name and address on one side and on the other side.

**USE THIS
OVERBAGH & AYRES
MFG. CO.**

413 So. Clinton St., Chicago, Ill.

Addresses Cincinnati Contractors

A large meeting of Cincinnati electrical contractors was held at the Hotel Gibson on February 15 to hear John Kuhlemeyer discuss "Overhead and Profit Analysis."

The Cincinnati contractors have for some time been discussing the possibilities of making an effective and working organization out of their local association.

* * *

Results of Detroit Credit Plan

Number of licensed electrical
contractors in Detroit:

August 1, 1926
850

August 1, 1927
740

August 1, 1928
481

February 1, 1929
374

Only 2 of these were on the
permanent cash basis.

* * *

To Help Contractors Organize

The house wiring contractors of Toledo, Ohio, have been offered the facilities of the Electrical League to help them start an organization. With the offer of help went the following statement:

"It is pretty generally admitted that the house wiremen did not participate in the general prosperity that prevailed during 1928. This is a curious fact when you stop to think of it.

"Here is a body of men connected with one of the three liveliest industries in the country, whose product is in constant and ever-increasing demand, and yet who failed to make money in a year when nearly every business was prospering.

"The current year promises even greater returns to business men, but electrical contractors are likely to see a repetition of 1928 unless they take steps to remedy prevailing conditions.

"That conditions can be remedied, there is no doubt. We know

RALCO Heavy Duty Receptacles

Like all Ralco Receptacles and Plugs, the switch blade type are built for service and safety.

Contacts are self-aligning, easily replaced and of ample size to carry their rated load.


So constructed that all strain is taken off of contacts, insulators and binding screws.

Type 321A
Receptacle
and Type
PRG321
Plug



Note— Now available in 2, 3, or 4 pole, 30 or 60 amp., 250 or 600 volts, with or without self-closing cover and with ground wire terminal.

May We Send Bulletin No. 101?

Ralco 
Mfg. Co.

125 N. Albany Ave., Chicago

\$50,000 Volume

\$5,000 *NET* Profit

No, this is not impossible. Many contractors are making very satisfactory profits, after drawing good salaries, because they do all their pricing and quoting from the NATIONAL ELECTRICAL RESALE PRICE SERVICE.

May we suggest you write and ask us to mail you full particulars? There will be no obligation, and no high pressure salesmanship will be used either, but so that we may know that you are a legitimate contractor and entitled to this information, we ask that you kindly attach your letter-head to the coupon below.

Henderson-Hazel Corporation

5005 Euclid Avenue
CLEVELAND, OHIO

Originators and Publishers of the

**National Electrical
Resale
Price
Service**

Henderson-Hazel Corporation,
5005 Euclid Ave.,
Cleveland, Ohio.
Dear Sirs:

Without obligation please mail me full particulars about the
NATIONAL ELECTRICAL RESALE PRICE SERVICE.
Name
Address
City or Town
State

E. C. 3-29

Save time and labor **U**se MISENER products on wiring jobs

Misener Rotary Hack Saw

Cuts clean round holes in terminal and junction boxes, slate and marble panels, and automatic starters for entering conduit.

Type B No. 2 Tool embodies 9 pipe sizes $\frac{3}{4}$ " to 4". Complete with $\frac{1}{2}$ " depth of Blades.....\$13.50

Type B No. 4 Tool embodies 6 pipe sizes $\frac{1}{2}$ " to 2". Complete with $\frac{1}{2}$ " depth of Blades.....\$ 7.00



Misener Safety Conduit Seals

These little discs of heavily waxed fibrous stock keep the exposed conduit airtight and water, dirt and cement proof.

They are slipped into the conduit bushing while the building is under construction and easily destroyed with a screw driver or knife when ready to fish the wire—not necessary to remove the bushing.

SEALS are inexpensive—plugged up conduits are costly.

Size Inches	St'd Pkg.	Price per 100
$\frac{1}{2}$	500	.20
$\frac{3}{4}$	250	.25
1	250	.25
1 $\frac{1}{4}$	150	.30
1 $\frac{3}{4}$	150	.35
2	150	.50
2 $\frac{1}{2}$	100	.70
3	100	.90

Tools, Blades and Seals Patented

Misener & Irving Mfg. Co., Inc.

Syracuse, N. Y., U. S. A.

how it can be done, and we are offering the good offices of the League to help the contractors find the way to help themselves."

* * *

Milwaukee Raising Modernizing Fund

Over one quarter of the \$2,000 budget for the electrical part of the home modernizing program of Milwaukee has been raised.

Considerable modernizing is now under way in Milwaukee. One old home has just been remodeled into a duplex and made a Red Seal job with three No. 2 wires for service.

* * *

Newark to Operate Credit Plan

The Detroit Credit Plan is expected to go into operation in Newark, N. J., within the next two months, under the sponsorship of the Electrical Contractors Association of Essex County. The contractors have appointed F. Rossiter as their representative. Meetings have been held with the jobbers and everything is about ready to start.

For Business or the Home

The New Levolver Link Switch



Here is a convenient and economical little 6-ampere link switch that is for both business and home chain lighting fixtures. Fits in place of one of the links and is hardly noticeable. Easily installed by cutting one wire and attaching both ends to binding posts of switch, doing away with splicing or rewiring of lead wires.

Consists of Levolver Fixture Switch, Levolver Link, and locking attachment. Brushed brass or Jap bronze finishes. Will take the surge of smothering even a cold 500-watt gas-filled Mazda lamp and will last indefinitely.

Your jobber can supply you or let us send you a sample



McGILL
MANUFACTURING CO.
Electrical Specialties of Quality
ESTABLISHED 1904
VALPARAISO - INDIANA



George E. Davis, New President Newark Association

The association is also sponsoring a bill before the state legislature, covering the licensing of electrical contractors.

At the last meeting of the association the following officers were elected for the ensuing year: George E. Davis, president; Wil-

The Koppers Building— A Pittsburgh Tribute to Youngstown Buckeye Conduit



AS AMERICA'S architectural masterpieces are reared skyward in ever increasing numbers, an overwhelming number will be found with their electrical wiring protected by Youngstown Buckeye Conduit.

Leading architects and engineers have repeatedly found through wide experience that when they entrust a building's electrical wiring to this rigid steel conduit they are assuring permanent protection to the electrical installation.

Youngstown Buckeye Conduit has earned the trust and confidence of electrical engineers and contractors through its *proved performance* in thousands of installations, while electricians prefer it because of its ease of installation.

The Koppers Bldg., Pittsburgh, Pa., wired in Youngstown Buckeye Conduit to assure lifetime permanence.

Architects: Graham, Anderson, Probst and White—Associated Architect: E. P. Mellon General Contractors: Mellon-Stewart Co. Electrical Contractor: Craig Electric Co.

THE YOUNGSTOWN SHEET AND TUBE COMPANY

One of the oldest manufacturers of copper-bearing steel, under the well-known and established trade name "Copperoid"

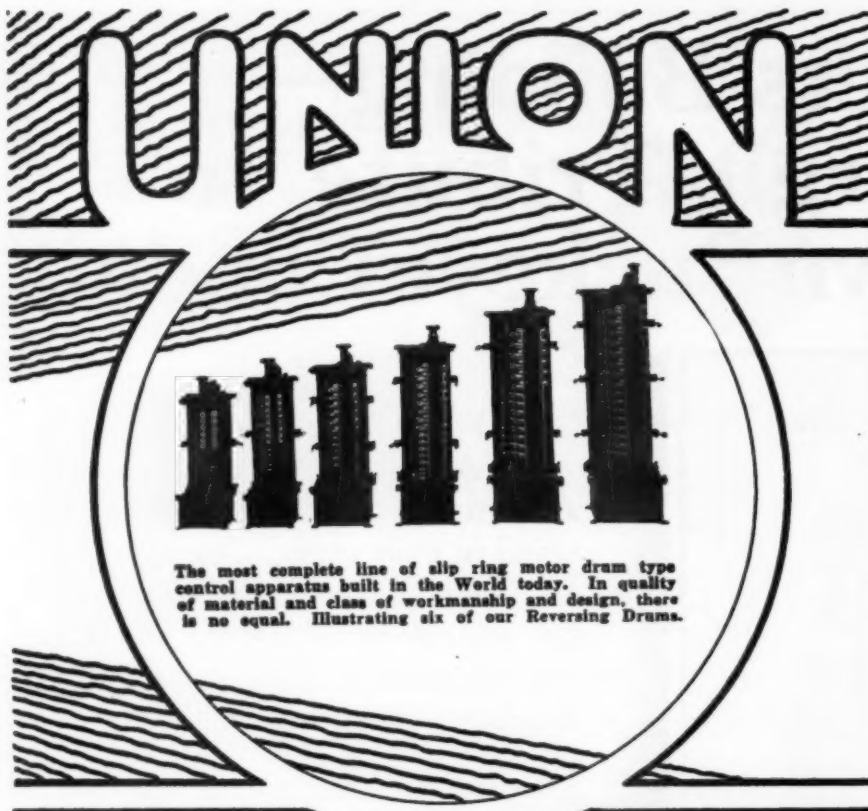
General Offices: YOUNGSTOWN, OHIO

DISTRICT SALES OFFICES

ATLANTA—Healey Bldg.	DENVER—Continental Oil Bldg.	PITTSBURGH—Oliver Bldg.
BOSTON—80 Federal St.	DETROIT—Fisher Bldg.	SAN FRANCISCO—55 New Montgomery St.
BUFFALO—Liberty Bank Bldg.	KANSAS CITY, MO.—Commerce Bldg.	SAVANNAH—M and M T Terminals
CHICAGO—Conway Bldg.	MINNEAPOLIS—Andrus Bldg.	SEATTLE—Central Bldg.
CINCINNATI—Union Trust Bldg.	NEW ORLEANS—Hibernia Bldg.	ST. LOUIS—Shell Bldg., 13th and Locust Sts.
CLEVELAND—Union Trust Bldg.	NEW YORK—30 Church St.	YOUNGSTOWN—Stambaugh Bldg.
DALLAS—Magnolia Bldg.	PHILADELPHIA—Franklin Trust Bldg.	

LONDON REPRESENTATIVE—The Youngstown Steel Products Co., Dashwood House, Old Broad St., London, E. C. England

YOUNGSTOWN



UNION ELECTRIC MANUFACTURING CO.
MILWAUKEE, WISCONSIN
Associated Manufacturer with, and Eastern Distributor for
DIAMOND ELECTRICAL MFG. CO., LOS ANGELES, CAL.

liam Shaw, vice president; C. H. Butler, treasurer, and E. C. Butler, secretary; executive committee, F. Rossiter, S. Beach, J. Buhl and E. Wilson.

* * *

Kirchner Heads Washington League

Joseph T. Kirchner of Biggs and Kirchner, electrical contractors, has been elected president of the Electrical League of Washington, D. C., for 1929. The Washington League stands third to California and Detroit in total applications and awards for Red Seal. This activity will be continued during the year and in addition, Mr. Kirchner states, the league will make every effort to improve the situation in the contracting industry.

* * *

To Go Back to 1925 Grounding

The grounding requirements in the 1925 code will be used as the basis for the next revision according to a resolution passed at the February 19 meeting of the Electrical Committee of the National Fire Protection Association. In addition to routine business various minor amendments to articles 4, 5, 6, 15 and 37 were approved. The action taken with respect to provisions for grounding called for a correlating committee which it is expected will meet in New York City on or about March 25. The resolution covering this action was as follows:

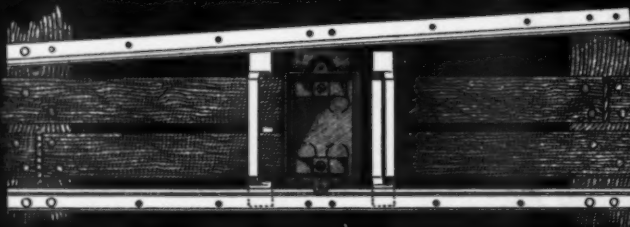
"MOVED: That the report of Article IX committee be laid upon the table.

"That a correlating committee be appointed consisting of the chairman of the article committees, all members of Article IX committee, together with the chairmen of the electrical committee and the electrical field engineer, ex-officio, to act as chairman and secretary respectively of the correlating committee.

"That the correlating committee be instructed to formulate Article IX and any conflicting articles for the Code, using in principle the 1925 Code and supplement with such revisions and additions taken from the 1928 Code, and articles in the 1929 preprint numbered 901, 902, 903, 906 and 907 as the correlating committee by unanimous vote of those present shall determine as necessary or desirable or non-controversial.

"That the correlating committee shall act with power for the electrical committee in this matter."

KRUSE



Switch Box Supporting Strips with or without **Lath Holders**

16 1/2-18 1/2-20 1/2-22 1/2-24 1/2-26 1/2 In. Lengths

Used by Contractors everywhere. A leader for ten years.
Stocked by all leading jobbers. Millions of sets used yearly.

WE ALSO MAKE

Kruse Bar and Old Work Hangers
Non-Metallic Sheathed Cable Straps
Peerless Type A Old Work Hangers
Fitz-M-All Outlet Box Hangers
"Ready" Service Fittings

MID-WEST METAL PRODUCTS CO. Muncie, Ind.
Send us your latest bulletin with prices

Name

Address

No second "dips" with G-E soldering paste

VARNISHES

STICKERS

OILS

PAINTS

FIBERS

TWINES

COMPOUNDS

TAPES

CORDS

SHELLACS

CLOTHS

TUBING

PAPERS



NO second "dips" are necessary with G-E soldering paste. It takes hold the first time. It works thoroughly and fast. You use less, yet the results are better. G-E soldering paste can be used for any metal except aluminum. It resists corrosion and is uniformly dependable.

For tinning, electrical repair and construction work, and for a multitude of other contracting jobs, there is no better soldering paste than that manufactured by General Electric. Moreover, contractors will find it as easy to sell as to apply.

Better look into the matter further; you can do it without obligating yourself. When you have filled out and mailed the coupon just below, you will receive a complete catalog of G-E insulating materials, many of which are equally valuable to the contractor who uses and sells only products of recognized quality.

800-502

GENERAL ELECTRIC

Section I-223,
Merchandise Department,
General Electric Company,
Bridgeport, Conn.

Gentlemen:

Kindly send me a copy of the G-E Insulating Materials Catalog.

9

Jobs where
you can install

SAUTER Electric Time Switches

1. Show windows
2. Flood lighting
3. Burglar alarms
4. Electric signs
5. Battery charging
6. Ventilating systems
7. Street lighting
8. Industrial plants
9. Airway beacons and Airports

THE satisfaction to yourself in installing a workmanlike, satisfaction-giving job—the kind that eliminates those return trouble calls that eat into profits—is yours when Sauter Switches are put in control of the circuit.

Whenever switching must be performed automatically on a dependable schedule, it is best to choose the time switch whose proven performance has always resulted in the lowest cost-per-operation. The manner of Sauter manufacture assures this.

Send for catalog to
R. W. CRAMER & CO., Inc.
136 Liberty St. New York City

Astronomic Dials

Sauter Time Switches are 14 to 40 day, key wound, or self wound by universal motor—they control currents from 2 to 300 amp., operating on voltages from 6 to 8000. They are equipped with plain or astronomic dial. The new astronomic dial operates in step with sunset and sunrise or with midnight "off" operation throughout the year.

SAUTER

TIME SWITCHES

Consumer Red Seal Publication

The Electric Service League of Toronto, Canada, is now publishing the "Red Seal Electric Home," a consumer publication for distribution to Red Seal and other homes. This is expected not only to further the Red Seal idea but also to develop the appliance demand.

A list of the manufacturer, jobber and contractor-dealer members of the league will be carried in this publication.

Four Hundred Price Changes

There were four hundred changes in price made in Resale Price Service in this month's issue of ELECTRICAL CONTRACTING. Readers are, therefore, urged always to use the latest issue.

Binghamton Contractors Organized

The house wiring contractors of Binghamton, N. Y., have been organized as a group of the local electrical league. During the latter part of January and the first of February they received an intensive training in estimating, pricing and over-head control from John Kuhlemeyer.

The Binghamton league has been thoroughly reorganized and has many progressive activities in mind. One of the important actions is the change in the local ordinance as of March 1, providing for more adequate services for houses as an encouragement for electric ranges and other large current consuming appliances.

* * *

Red Seal on the Air in Indianapolis

The Red Seal hour is broadcasted from station WFBM of Indianapolis every Saturday night. This hour has been donated to the Indianapolis Electrical League for this purpose by the Indianapolis Power & Light Company which owns the station. In addition to this hour, Ted Brown, manager of

Once there were
two
Traveling Salesmen
and...

THE ADAPTI Representative said, "I'll bet you can't figure out any conduit combination that can't be done with

ADAPTI LETS

(Standard Solid Fittings)



and with

ADAPTI BOXES

(Flexible Rigid Fittings)



and he won, too.

WHY NOT GET ALL YOUR
FITTINGS FROM ONE
SOURCE—



The **ADAPTI** Co.
2996 E. 72nd St., Cleveland, O.

NEW YORK CITY
A. Stone, 112 East 23rd St.

PHILADELPHIA
Craven Electric Sales Co.,
30 Bank Street

SOUTH BOSTON
The Hastings Electric Sales Co.,
42-50 Binford Street

the league, talks on Red Seal for five minutes every Wednesday night.

The Red Seal specifications have been placed in the hands of vocational students in the Technical High School in Indianapolis. There was considerable resistance to this on account of the sentiment created against so-called propaganda among pupils. The league finally won out and secured the cooperation of H. F. Markus, electrical instructor at the school.

There are 300 electrical students and 67 of them are taking the house-wiring course. Getting the Red Seal idea over to these boys means that the message will be carried into their homes and consequently into those of their friends and neighbors.

* * *

Youngstown League Election

Lloyd Robinson, manager of the Youngstown Electragists, was elected a member of the board of directors of the Electrical League of Youngstown at its annual meeting. The other members are W. A. Maloney, T. E. Miller, H. D. Sommer, E. D. Sutton, A. N. Thomas and E. J. Beil.

The newly elected board, at its election on February 5, elected the following officers to serve during the ensuing year: President, H. D. Sommer, The Mook Electric Supply Co.; vice president, A. N. Thomas, Westinghouse Electric & Mfg. Co.; secretary-treasurer, E. J. Beil.

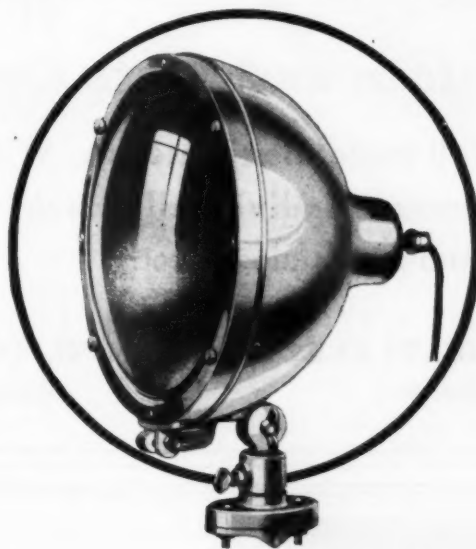
* * *

To Prepare Enabling Act Standards

At the annual state meeting of the Michigan Association of Electrical Inspectors which was held at the Hotel Pantlind in Grand Rapids, February 16, H. B. Kirkland, director of the uniform ordinance department of the Society for Electrical Development, announced that his committee had authorized the preparation of standards for state enabling acts governing local licensing.

L. W. Davis of the Association of Electragists, International, was the principal speaker, his topic being "The Relationship of the Electrical Inspector to the Contractor."

New! Improved! NATIONAL



FLOOD LIGHT with Many New Features!

The New, Quickly Detachable Hinged Cover makes cleaning and relamping easily accessible.

The focusing adjustment is of improved design, and assures a powerful concentrated Flood of Light where desired.

THOROUGHLY WATERPROOF—of rugged construction, compact and of good appearance—the National everlasting reflector insures efficient light and permanency.

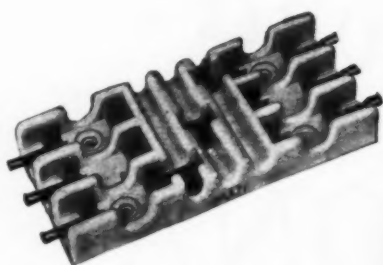
Adjusted to the use of either 250 or 400 watt type G-30 lamps.

Furnished complete with ten-foot all-weather rubber-covered cord and molded plug.
Equipped with all position mounting bracket.

Write for descriptive literature

National Appliance Co., Inc.
Jackson, Mich.

MULTI



Porcelain and Slate Cutouts

Well made. Best materials. Wide selection. Individually packed.
Send for catalog sheet.

MULTI ELECTRICAL MFG. CO.

1840 W. 14th St.,

CHICAGO, ILL.



THE ONLY CONTRACTOR IN HIS TOWN:—R. C. Wright, proprietor of Wright Service, La Grange, Wyo., drives to Denver quite often, and we snapped him in front of the General Electric Supply Corp., of that city, during one of his visits. Being the only contractor in town, he does all classes of work, including much electrical welding. Residence wiring is one of his best bets.

All-Conduit Ordinance Sought

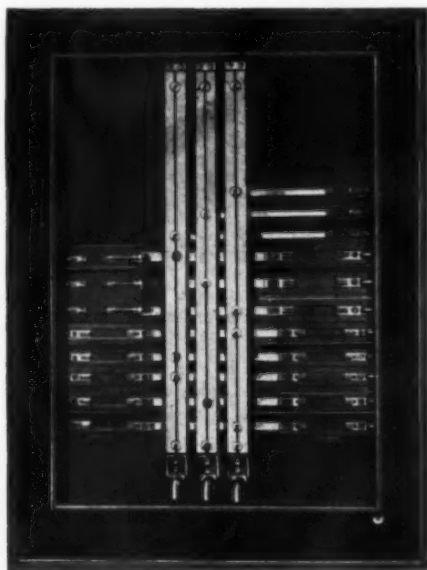
The city council of Fort Collins, Colo., has been asked to amend the local wiring ordinance to eliminate knob-and-tube wiring and to require that all wiring be in conduit except that armored cable would be used for concealed work in finished buildings and open wiring for temporary work.

Provision is also made in the proposed ordinance for prohibiting a licensed contractor from permitting anyone not on his payroll to do work for which he shall have taken out a license. This is aimed at those contractors who permit their names to be used by unlicensed contractors in taking out permits.

* * *

Cincinnati on 1928 Code

The 1928 National Electrical Code was scheduled to be enforced in Cincinnati and vicinity on March 1. In anticipation of operation under the new Code, the Cincinnati Electric Club conducted two meetings, one on February 6 and the other on February 7, covering the changes over the previ-



Space is provided for future circuits which may be ordered from our factory as soon as their sizes are definitely decided upon.

Progressive Contractors Use Convertible Distribution Panels

These panels permit an electrical contractor to alter the ampere capacity of the individual circuits from 10 amperes to 200 amperes according to load requirements. The only tool required is a screw driver.

They cost no more than the now old fashioned slate panels.

Send for literature and prices.

THE LEXINGTON ELECTRIC PRODUCTS CO., Inc.

207 E. 43rd Street
New York, N. Y.

12 Chapel Street
Newark, N. J.

PANEL BOARDS—STEEL CABINETS—SWITCHBOARDS—SWITCHES

ous Code. The first meeting was addressed by F. O. Evertz, superintendent of the electrical department of the Ohio Inspection Bureau, and A. Penn Denton, engineer director, armored cable and flexible metallic conduit section of N. E. M. A. and former chairman of Article 5 Committee.

The second meeting was addressed by Victor H. Tousley, electrical field engineer of the N. F. P. A. and secretary of the National Association of Electrical Inspectors, and M. G. Lloyd, chief of the section of safety engineering of the Bureau of Standards.

* * *

Central Station Relations

Statement by Earl N. Peak, Chairman of A. E. I. Committee on Relations with Central Stations; President of Iowa Associations of Electricians, and Chairman of Iowa Joint Conference Committee of Electricians, Jobbers and Central Stations.

I HAVE been elected to the chairmanship of the A. E. I. Committee on Relations with Central Stations and the N. E. L. A. With this responsibility comes an un-



Earl N. Peak

usual amount of unrest in some localities between contractor-dealers and central stations.

I am an electrical contractor-dealer and have given twenty-five years of my life to the electrical industry, and have served in all of its branches. I have not at any

Sell Convenience and Economy in Lighting



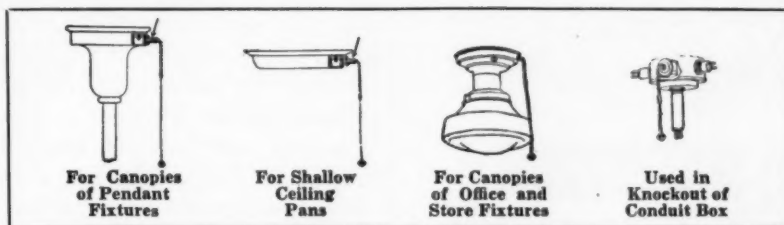
With the *Levolver* Heavy Duty Fixture Switch

Sell the idea of greater convenience and economy in the use of higher-wattage lamps in industrial plants and commercial institutions by installing the Levolver Fixture Switch in outlet box, canopy or ceiling pan and controlling each unit individually. The tendency toward bigger lamps is spreading fast, creating a big market for increasing sales of Levolver Fixture Switches.

Rebuilt, of heavier section, eliminating possibility of breakdown. With a rating of only 6 amperes, this switch will take the initial 45-ampere smash of switching a cold 500-watt gas-filled lamp.

Easy to install. Skin and loop one leg of circuit and attach the two ends to the terminals of the switch.

Get them from your jobber or let us send a sample



MCGILL
MANUFACTURING CO.
Electrical Specialties of Quality
ESTABLISHED 1904
VALPARAISO INDIANA



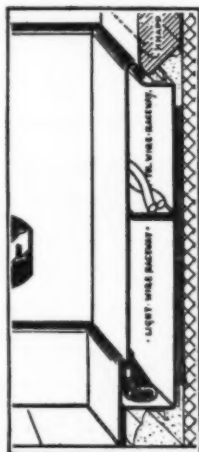
What does Conduo Base mean to the Electrical Contractor?

BUILDING Owners and Managers, Architects and Engineers, Tenants in office buildings, even Home Owners are demanding such flexibility of distribution of electric outlets as to be able to plug-in for Desk Lamps, Floor Lamps, Dictographs, Telephones, Buzzers and what not, at points most convenient to their furniture layouts.

Such flexibility of distribution of outlets for both High and Low Tension Wiring is only feasible by installing electric branch wiring in CONDUO-BASE, and unobtainable otherwise.

In a CONDUO-BASE equipped building Convenience-Outlets for any electric use can be had just where one wants in a jiffy.

Electric branch wiring in CONDUO-BASE is the greatest forward step in electric wiring.



Cross section of Junior Conduo-Base

CONDUO-BASE IS THUS CREATING THOUSANDS OF DOLLARS WORTH OF WORK FOR THE ELECTRICAL TRADE.

THIS INCREASE OF BUSINESS IS AT YOUR COMMAND IF YOU WILL LET US SHOW YOUR WIRING PROSPECTS THE CONVENIENCES AND ECONOMIES OF CONDUO-BASE.



Manufactured by

Dahlstrom Metallic Door Co.
Jamestown, N. Y.

The United Metal Products Co.
Canton, Ohio

Knapp Brothers Mfg. Co.
Chicago, Ill.

time ever received one cent of compensation from any contractor-dealer's local, state or national organization, nor have I ever received one cent from any central station or central station organization. I do not have any stock in any central station, nor has any central station any stock in my organization. For these reasons, I feel I can speak freely on this subject.

I know something of the feelings which exist in some localities and the causes of such, and I believe that most of these misunderstandings and disagreements are due to lack of acquaintanceship, confidence and industry cooperation in action.

I am sold on a plan different from that which has been prominent in the past years, and know from actual experience that it has paid dividends and shown great results.

Not Destructive

It is not a destructive, tearing-down plan. It is just the reverse of this. It is a plan the purpose of which is to do something constructive for the industry, to build up good will between the different branches and the general public.

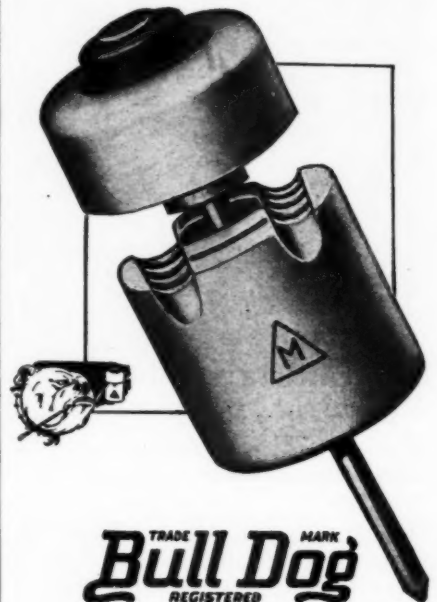
I know of no constructive program that has had as its beginning a destructive or detrimental policy for some branch of the industry of which it is a part.

Would such a program as follows appeal to you for your community or state?

A program in which all branches of the industry are interested and working together? Would you like to have your state officers on such friendly terms with the officers of the other branches that in case any misunderstandings arise, they will accompany you to the seat of the trouble and assist in correcting it?

Would you like to have your central stations help plan sales campaigns jointly with contractor-dealers, carrying advertising for them, furnishing solicitors and demonstrators, putting merchandise on contractor-dealer floors without any expense to the contractor-dealer? Furnish window trims and trimmers if you desire, with the understanding that mer-

"It has a grip like its namesake"



Split Knobs

THESE are the safe, approved knobs for all types of residence wiring. They mean better jobs at no added cost. Bull Dog Split Knobs, together with Illinois Porcelain Tubes, Cleats, Solid Knobs and Reversible Square Split Knobs, form a complete line of standard porcelain.

Sold Through Wholesalers.

Illinois Electric Porcelain Co.
Macomb, Illinois

chandise not sold may be returned without any expense, and that the merchandise sold may be financed, if the contractor-dealer wishes, with the contractor-dealer receiving the standard discount? If the contractor-dealer does not have a display floor, give him full privilege to take his customer to that of the central station and use it as if it were his own?

If a demonstration is desired, have one made by the central station with their own demonstrators or salesmen, and if the sale is made, the contractor-dealer be given the credit?

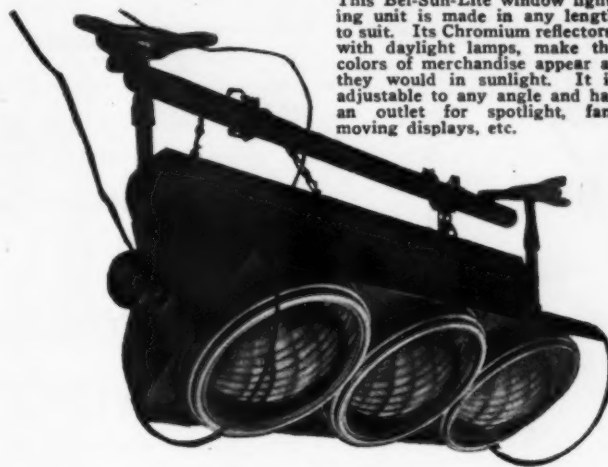
Would you like to have your central station or electrical jobber call and advise that they desire your help in the engineering work on a certain job, or better yet, hand you a nice contract to be installed, or advise you of a new town to which they are going to extend their lines, and ask your cooperation in construction of same? Send you information on street lighting systems and traffic signal installations?

Joint State Committee

Would you like to have a joint state committee, composed of executives of all branches, who act together in promoting good will and who assist in keeping each branch informed of help which may be rendered to assist the industry and help to encourage and build up better fellowship? A place where presidents, vice-presidents and general managers of all branches call each other by their first names, where dinners given by one group have officers from other branches as their guests, and where every meeting of any group welcomes members from another?

Does this seem to you something of a start toward what you would like to see in your locality and state? If so, you may have it. It's up to you.

Applesauce, I hear somebody say. I am ready to call your hand. You say it can't be done. All right, come and see me in my state and I'll prove it can be done and will show it to you in actual operation—not to the point of perfection, but so much better than it has ever been in the past twenty-five years that I can take you to



This Bel-Sun-Lite window lighting unit is made in any length to suit. Its Chromium reflectors, with daylight lamps, make the colors of merchandise appear as they would in sunlight. It is adjustable to any angle and has an outlet for spotlight, fan, moving displays, etc.

BEL-SUN-LITE

Makes Every Store A Stage

Staging a display has taken the place of trimming a window in modern retailing. Live merchants realize that show windows must work harder during the hours when passers-by have the most time for looking—in the evening. The Bel-Sun-Lite window lights are stage lights adapted to store-window use. They fill the window with radiance that lets no detail go unobserved. They cast no strong shadows. They let no light fall directly into the eye outside. They increase sales for the storekeeper—and you. Who is the most alert merchant in your community? (Next to yourself, of course.) He is your best prospect.



Spotlight the Bargains

One article in every window, the leader, should stand out in especial brightness. This little Bel-Sun-Lite brings it out with blazing emphasis. Fitted with a color screen and used on a single item in an otherwise dark window, the effect is a knockout.

Ask Our Nearest Distributor

to supply you with full information about Bel-Sun-Lites, the line with the biggest future. If you can't find his name in the phone directory of one of these cities, write us.

Atlanta, Ga.
Boston, Mass.
Delaware, O.
Ft. Worth, Tex.
Gary, Ind.

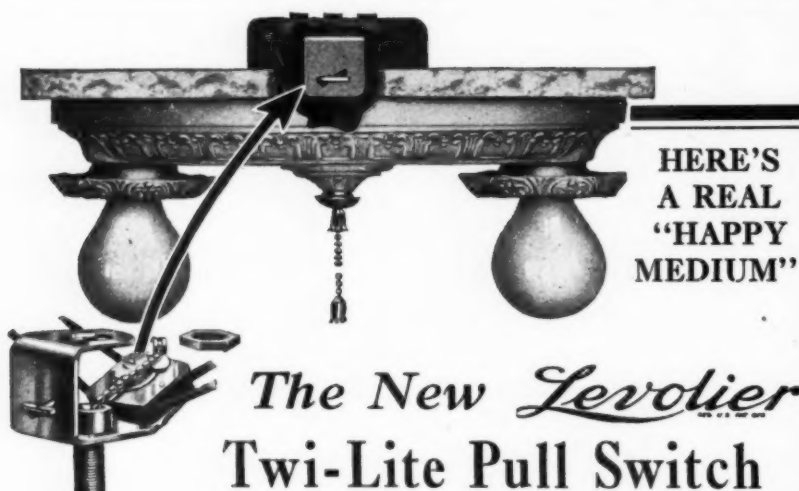
Indianapolis, Ind.
Kansas City, Mo.
Los Angeles, Calif.
Louisville, Ky.
Miami, Fla.

Minneapolis, Minn.
New Orleans, La.
Omaha, Neb.
Philadelphia, Pa.
St. Louis, Mo.

San Antonio, Tex.
San Francisco, Calif.
Seattle, Wash.
Tulsa, Okla.
Tampa, Fla.

Belson Manufacturing Co.

804 Sibley St., Chicago, Ill.



HERE'S
A REAL
"HAPPY
MEDIUM"

The New *Levolver* Twi-Lite Pull Switch

Oftentimes when there is a desire to have the light softened in the living room, the sick room, the nursery, hall or bath-room there is no means of doing so because the lighting fixtures are such that the lights can only be switched on full or completely off. There is the solution to this in the new Levolver Twi-Lite Pull Switch for ceiling fixtures. It embodies the

DIM-BRIGHT-OFF

feature, which is easily attached. By means of a simple, two-piece detachable hickey the pan is hung the same as any other ceiling fixture. When the dim light is used there is one-seventh normal illumination and but one-third the current consumed. There is a universal desire for the Twi-Lite Switch everywhere that it has been demonstrated.

Write for sample and full information



MCGILL
MANUFACTURING CO.
Electrical Specialties of Quality
ESTABLISHED 1904
VALPARAISO - INDIANA



all the old timers who have gone through the game and have had the experience of the past in three branches of the industry, and who will take off their coats and fight for the industry, for themselves and for the continuing of the plan.

Working together, playing together, calling each other by their first names are common practices, where in the past it was the reverse. "It can't be done," was what nearly everyone said, but a few who didn't know any better went out and did the job, and it has worked so well that the central stations, jobbers and contractor-dealers today are all working for a continuance of the plan.

May I ask one thing of you who are interested in this subject? Please sit down and think, with a mind free from malice, envy and hatred. Think of the desired business conditions and connections. Then ask yourself, "What have I done to help?"

"Don't Use My Name"

Have you reported conditions in your own experience that you feel are unfair, in a manner that they could be proven? Or if you did report them, was there a string tying the hands of your Association whom you asked to handle the matter for you, something like this: "Don't use my name in any way. It might offend the person concerned and I might lose business?"

Such statements make my blood boil. If there is an unfair condition that is detrimental to your business, it is only just and right that it should be brought to the attention of the offenders and no one should fear to present and support his complaints. On the other hand, if one's business is suffering on account of a bad practice and it is permitted to continue, how long will it be before you will have no business at all? Why have a fear of losing further business if your claim is right and just? There is nothing to lose and everything to gain. Throw back your shoulders, meet the issue squarely and fairly, and you will be dealt with likewise.

Put on your hat, go out and call on your competitor, your central station manager. Arrange to visit the central station president. Plan

THE ANSONIA ELECTRICAL CO. PUSH-BUTTONS



No. 507—Name Plate Push

You need push buttons on most every job—but, do you know just what design to select?

The Ansonia line includes push buttons for every conceivable need, will help you, and save time. You can obtain Ansonia Push buttons through any electrical jobber.

Write for this 64-page catalog E which shows a complete line of Push buttons and other electrical house goods.

THE ANSONIA ELECTRICAL CO.
ANSONIA, CONN.

ANNUNCIATORS — BELLS — BUZZERS — PUSH BUTTONS

ELECTRICAL HOUSE GOODS



to visit your supplier's place of business, and get acquainted with all the executives of all the branches. This is the first step in the right direction, and you will have made a big step toward your objective.

Then, by all means, back up your local, state and national organizations. Possibly the officers have not been your choice. They may not have obtained the results you desired, but what have you done? Have you given them your full assistance and your support? Have you kept up your membership? Does your record excel or check up with theirs?

Do not be like the calf that deserted its mother to follow the fine looking steer—it may look much better on the surface, but sooner or later meal-time will come. Think it over!

There was a time in this industry when it was thought that we must string barb wire as a static wire. It was believed that the desired results would not be obtained without the sharp barbs extending in all directions. This made it hard to handle or approach without being jabbed or scratched, or having one's clothing torn or something happen to keep those working with the installation in a very unpleasant frame of mind.

What happened to the barb wire as a static line? Engineers got together and found that a smooth conductor would do the same job as well, and later on, they found in many places that there was no need for a wire at all, and it was eliminated entirely.

Isn't it time to remove the barbed static wire from our industry relations?

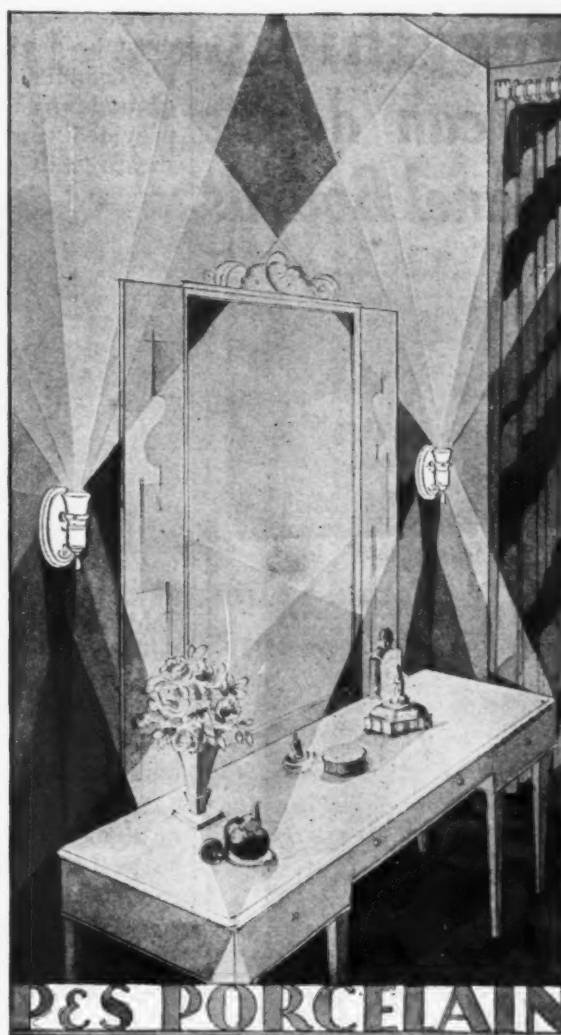
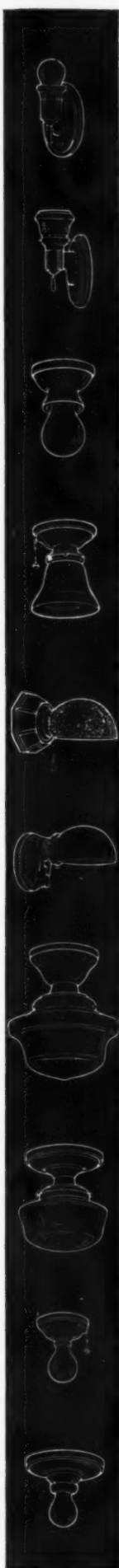
* * *

Elucidation of Grounding Rule

(Continued from page 24)

for other purposes may be either copper, metal pipe, or rigid electrical conduit. By the metallic underground piping system is meant the water, gas, steam, etc. The first mentioned is, of course, the one to be recommended.

Then, if the above cannot be followed and driven grounds have to be used, a separate grounding



In addition to their beauty of line, their colors, their cleanliness and ease of installation, upkeep costs are eliminated with P&S Alabax Fixtures. Made from non-conducting porcelain, they are designed to conform to the National Electric Code and are listed as standard by the Underwriters' Laboratories.

Lighting fixture prospects are now reading about the merits of P&S Alabax in our national advertising in leading magazines. Customers will want P&S Alabax fixtures; architects will specify them; and contractors are glad to use them. As easy to install as to sell, and there's a good profit in every sale!

SOLD THROUGH JOBBERS

Send for our complete catalogue showing the P&S Alabax line in full colors.

"P&S make labor less"

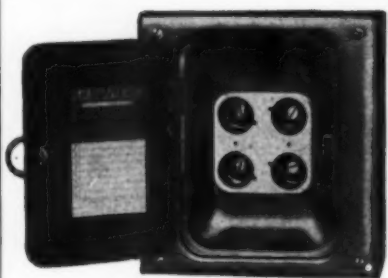
PASS & SEYMOUR, INC.

Division C Solvay Station Syracuse, N. Y.

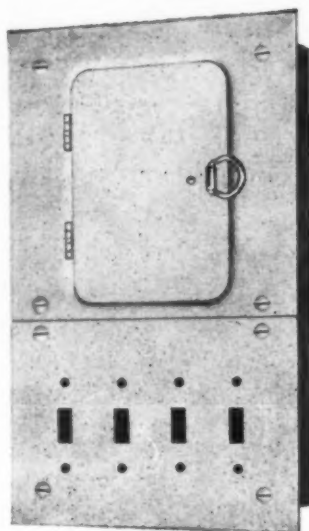
P&S
Reg. U. S. Pat. Off.

ALABAX
Reg. U. S. Pat. Off.
LIGHTING FIXTURES

Everything- You can desire in Panel Boards



Cat No. BS 4



FUSITHERE Panel Boards are designed to facilitate installation in every possible way, as well as give the customer the best equipment for the purpose. Neat and compact, they have ample wire space. Flush boxes have adjustable plate. Panels are Copper bus bar type with accessible wire terminals, test holes and dead front. Various size knockouts on all sides and back.

Full line of fuse panels and cabinets for any installation.
Industrial and theater switchboards. Stage foot and border lights.

Your inquiries given our prompt attention

**ELECTRIC APPARATUS
CO.**

702-706 N. HALSTED ST.
CHICAGO, ILL.



wire and separate ground electrode must be used to ground the service conduit and another separate ground wire and electrode must be provided for the service cable sheath, and still another ground wire and electrode must be provided for the equipment.

In other words, where driven grounds are used, the same ground wire and earth electrode must not be used for grounding the service (or system) and for grounding the equipment.

On a D. C. system we are not concerned with grounding the neutral wire of the system as this is done at the supply station and not at the individual service. But otherwise, the same conditions hold and if the service enters the building through a conduit and has a metal (lead) sheath and the building is wired with a metallic clad system, separate ground wires and electrodes must be employed.

Let us hope that we can always, or almost always, find a water pipe so as to avoid these troublesome things!

It will be well to remember that the system grounding wire is not to be less than No. 8 as is also the wire used to ground the service conduit. The size of wire to use for grounding conduit, armored cable, etc., is given in Rule 905-K but it must be remembered that the grounding wire for fixtures is to be not less than No. 14.

* * *

Happiness Preferred

(Continued from page 16)

having paid out the same overhead, including gas or car fare, as if he had stayed all day on the job. So he is out several dollars in real money that cannot be made up.

Mr. Binder figured that a man is bound to be happier and take more interest in his work if he is kept busy and avoids the pay losses as outlined above. So his first step was to provide continuous work. This is done in several ways, chief among which are sending the man or men to a different job or sending them back to the shop to do something which has been saved for just such a rainy day.

To bring one big job after



SUPERIOR Conduit Fittings

C. S. T. Superior
Conduit Bushings.



Assure Satisfaction

Contractors know the value of well made conduit fittings because they save wiring time and always assure a better finished job.

The Steel Tank Line of Conduit Fittings are all made from heavy clean cut castings, perfectly machined so as to leave no burrs and heavily galvanized.

All fittings come in handy unit packages and are manufactured according to N. E. C. standards.

Write for our catalog.



C. S. T. Superior
Conduit Locknut,
perfectly shaped
—clean threads—
no burrs.



C. S. T. Superior
90°
Angle Con-
nector.



C. S. T. Superior
Connectors No.
601 Squeeze
—straight
type. A
complete
line.

SERVICE

Steel Tank Conduit Fittings are shipped on the same day the order is received from warehouse stocks located in principal jobbing centers.

CHICAGO STEEL TANK CO.

Electrical Division

6400 W. 66th St.

Chicago



another to successful completion it is necessary to have the best of supervision all through. Mr. Binder's plan was to pick good foremen and then build them up to the point where they would go on a job and take the same interest in it that he felt himself. The result is that he has three foremen who are considered permanent. He pays them the foreman's rate regardless of what they are doing for the moment, they draw forty-four hours a week and are paid for holidays to boot. He expects them to show unusual interest in their work and they do it cheerfully because there is no little worry in the back of the head about the pay check coming home with its tail bobbed.

Comfort of Men

Another point that received his attention early in the game is the comfort of the men on the job. Before work starts on a big installation, a 10 by 12 ft. frame shack is erected. A stove is provided if the season requires it, and there are shelves for all material; there is even a section for keeping blueprints. This shack gives the men a place to change their clothes, eat their lunches, make repairs, etc.

In order to get a first hand slant at the spirit created by this system, the interviewer decided to visit the three foremen at their respective assignments in Omaha. Art Cronmeyer was found at the Paxton Hotel addition, 14th and Farnam Sts.; Bill Ratliff was holding the fort at the new bus station, 16th and Jackson Sts., while A. C. Krell had just been sentenced to about three years on the Joslyn Memorial, 22nd and Dodge Sts.

The attitude and conduct of all three confirmed everything previously learned about their reaction to good treatment. Each was right on top of his work and going strong, with no apparent effort. Yet each was able to stop instantly and pose for a snap shot, when told that the boss's permission had been secured. In point of service, Krell and Cronmeyer are practically tied at near ten years; Bill Ratliff about four years.

A single instance will serve to

EXPECT GREAT THINGS

*in the improved
sectional type*



*They will measure up to
your expectations*

Inbuilt quality and superior design have always characterized Wurdack Panel Boards. But these improved sectional panels, with their many advanced features, set a new standard in panelboard construction. Consider these outstanding features:

- ⌚ All parts are removable from the front. Ready access is provided to switch mechanism and fuse connections. It is especially easy to replace copper shell or contactor screw when these become badly burned from short circuit or heavy overload.
- ⌚ All new tumbler switches are rated 30 ampere, 250 volts and are heavy duty type, with mechanism and contact parts capable of most severe service. Single pole tumbler switches are equipped with Bakelite arc snuffers lengthening life and increasing breaking capacity. Blades are self aligning with contacts. The entire steel frame and switch mechanism is thoroughly rust-proofed.
- ⌚ Entire back of sectional panel is covered with a continuous steel plate, which guards against injury during installation, and always keeps mechanism of switches free from dust and dirt.
- ⌚ Panel is secured in cabinet by means of four special mounting studs, which permit adjustment both in-and-out and laterally. The arrangement is such that adjustment can be made after panel is installed without the use of any special tools.
- ⌚ All-steel fronts, of heavy gauge sheet, are smooth and flat and carefully finished in genuine black lacquer. Easy to keep clean and neat in appearance.

Assure satisfaction to both your client and yourself by installing Wurdack Panel Boards on your next job. Investigate their merits . . . Write for latest catalog.

WMWURDACK
ELECTRIC MFG. CO.

4444 CLAYTON AVE., ST. LOUIS, MO.

Fretz-Moon

No conduit receives more care in the making—none is more dependable.

Fretz-Moon Tube Co.
Butler, Pa.

RIGID CONDUIT

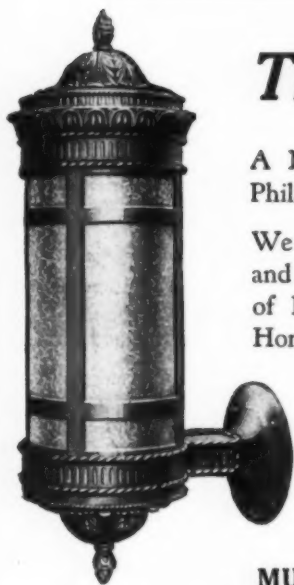


prove Harry Binder's statement that the extra expense involved in taking care of the men comes back somewhere, sometime. Not so long ago, he was totally incapacitated for a period of eight long months. At first he could not help worrying and chafing a bit, but soon learned there was nothing to fear.

No less than five large buildings were wired by his men during his unfortunate illness, and *there was not a single complaint!* He even received many comments and congratulations on the loyalty of his force, from interested parties. He was told that his foremen used good judgment in settling things that came up, and that they were unusually accommodating and courteous.

This shows that the good work done by contented men is a help in getting new business as well as a source of economy and efficiency in actual operations.

MURLIN



No. 1747

This Lantern,

A Murlin conception, ornaments the Philadelphia General Hospital.

We furnish Bronze or Iron Brackets and Lanterns appropriate for all types of Public Buildings, Apartments, Homes, etc.

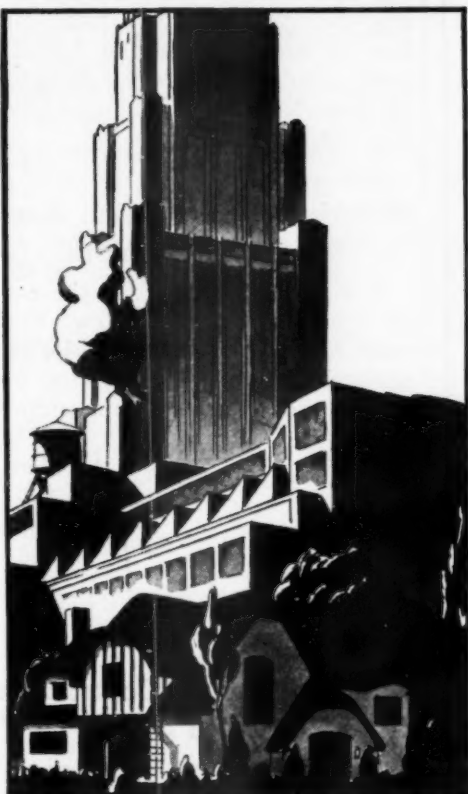
Send for the new Murlin catalogue.

MURLIN MANUFACTURING CO.
5420 Paschall Avenue Philadelphia, Pa.
Member Artistic Lighting Equipment Association



**ELECTRICAL
CONTRACTING
READERS
WIN PRIZES**

Louis G. Elfers (circle) South Side Electric Shop, Muscatine, Iowa, first prize winner (\$500) and W. P. Collins, Collins Electric Co., Springfield, Mass., second prize winner (\$250) in Edison Lamp Works "Six Shooter" activity. Mrs. Bouck, of B. W. Bouck & Co., Cobleskill, N. Y., was a \$100 prize winner.



*Westinghouse
equipment for buildings
includes:*

Circuit Breakers	Panelboards
Elevators	Ranges
Fans	Safety Switches
Fuses	Solar Glow Heaters
Insulating Materials	Switchboards
Lamps	Turbines
Lighting Fixtures	Transformers
Motors and Control for Ventilating Sys- tems, Pumps, etc.	Watthour Meters
	Water Heaters



*The Sign of a
Westinghouse
Dealer*

For bungalow or business building complete electrification from a single source . . .

The towering downtown structure and the suburban dwelling have this modern problem in common:

Both need reliable electric installations to make them fit the requirements for which they were designed.

Both can have complete electrifications of the same high quality and from the same responsible source—Electrifications by Westinghouse.

Westinghouse has designed and manufactured complete electrical equipment for many of the leading buildings of the country. Through the widespread Westinghouse organization all the equipment can be supplied, from lamps to elevator equipment, from panelboards to pump motors—for the complete electrification of any building, large or small.

Detailed data on all Westinghouse products is available to any one charged with the responsibility for equipping modern buildings. And there is a Westinghouse building specialist available within easy call of any office.

Write for the new Westinghouse publication, "Building in the Electrical Age."

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
EAST PITTSBURGH, PA. OFFICES IN PRINCIPAL CITIES

Westinghouse

Complete electrification for modern buildings





Pin-Plug Connectors

FOR quickly and securely connecting portable lighting units, portable electric tools, and other electrical devices to supply lines—available in a complete range of sizes; two-pole, from 5 to 200 amperes, 250 volts; also single-pole, three-pole, four-pole, multiple circuit, and branch-off connectors in various sizes.

OTHER KLIEGL LIGHTING SPECIALTIES

Borderlights
Cove Lights
Footlights
Color Lighting

Exit Signs
Aisle Lights
Step Lights
Auto-Calls

Floor Pockets
Wall Pockets
Panel Boards
Dimmers

Floodlights
Spotlights
Music Stands
Scenic Effects

for Descriptive Literature write

KLIEGL BROS

UNIVERSAL ELECTRIC STAGE LIGHTING CO., INC.

321 WEST 50th STREET

NEW YORK, N.Y.

Rural Line Construction

A pamphlet on recommended practices for design and construction of rural lines has been published by the National Electric Light Association. Contractors doing this class of work should find this pamphlet very helpful. It may be secured from the Association's headquarters, 420 Lexington Avenue, New York City, at a price of forty cents.

* * *

Electrical Construction Accidents in New York

A study of accidents in the construction industry of New York made by the State Industrial Commission revealed the following figures for the electrical construction industry:

Year	Accidents
1924	350
1925	481
1926	596
1927	624
1928	522

* * *

To Work with Contractors on Red Seal

The Pittsburgh Electrical League has worked out a plan to furnish electrical contractors with the names and addresses of prospective builders and home owners that are Red Seal prospects. The league proposes to study the building reports daily and send to the contractors the information regarding construction in their neighborhood so that the members may be able to be on the job early. The plan is as follows:

From the names and addresses of prospective builders and home owners the league selects those jobs that are good Red Seal prospects. Each prospect is sent a brief letter designed to make him read a booklet, enclosed with the letter, which effectively introduces the Red Seal idea.

On the same day that this mailing is made to the prospect, a duplex self-addressed and stamped postcard is sent to a contractor doing business in the neighborhood of the prospect.

One part of this card gives the contractor complete data on the prospective job, and makes a con-

No More Smoked Ceilings



IDEAL Universal WIRE CONNECTORS

eliminate the blow torch!

One size fits all roughing or fixture joints

Double current carrying capacity

Write today for free sample

New Ideal Commutator Dresser Co.
Low 1041 Park Ave., 329
Price Sycamore, Illinois.

Please send me sample, new prices and complete information regarding Ideal Universal Wire Connectors

Name

Address

CityState

venient file-card for the contractor to keep track of his calls and the results of his interviews with the prospect.

The other part of the postcard is to be returned to the league office within a week of its receipt, and is to contain the result of the contractor's interviews, to date, with the prospect.

Where two or more contractors are doing business in a certain neighborhood, the prospects will be divided equally among them, except that contractors who do not follow the system properly will be dropped from the list.

* * *

Luckie New Houston City Electrician

Jack S. Luckie has been appointed city electrician of Houston, Tex., succeeding the late Clarence George.

For twenty-eight years Mr. Luckie has been connected with the city electrical department, working under Mr. George during that time. He was foreman in charge of electrical installation and operation under Mr. George for more than fifteen years. Since the death of his chief, Mr. Luckie has served as acting city electrician.

* * *

Fined for Faking Ground Connections

An electrical contractor of Louisville, Ky., has been fined \$10.00 each in five cases of faking ground connections. He was indicted in nine cases but four were dismissed.

The Louisville ordinance requires that the system grounding conductor be enclosed in conduit for protection. This conduit if rigidly connected to service switch box or service pipe, and bonded to water pipe, may also serve as conductor grounding equipment.

The contractor in question, ran the ground pipe in the usual way, from switch box to the water pipe, but instead of pulling the No. 8 system grounding conductor through the conduit, he removed the insulation from short pieces of wire and stuck them in each end of the pipe. Then, to get contact for the inspector's test, he placed small wooden plugs in the pipe to hold the wire against the conduit.



High Tension Insulating Compounds

Approved by
LARGEST
Public
Utility
Companies



MINERALLAC meets all of the particular specifications demanded by leading Public Utility Companies. It is a material having high dielectric strength and insulating resistance between conductors, and from the conductors to the ground; it thoroughly binds itself through the cable insulation and will not crack or pull away in very cold weather, or flow too readily in hot weather. It displaces all moisture, air and gas, eliminates all voids and remains practically intact or without change in volume.

Minerallac is made for all purposes

—different grades for different applications and easy to apply. It is excellent for filling in cable joints, filling potheads or similar receptacles. Transformer coils impregnated with No. 2-A Minerallac will effectively prevent the absorption of any moisture and yet allow the oil to act as a cooling agent. It is recommended for use in telephone lines for the elimination of circuit leaks—for insulation of low voltage apparatus and appliances—for protection of coils and exposed parts.

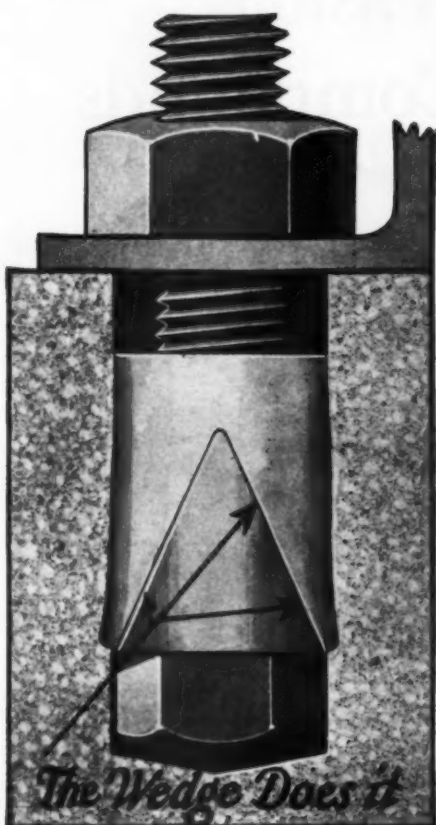
Also manufacturers of cable and conduit hangers carrying the approval of the Underwriters' Laboratories—Jiffy clips for hanging pipe, conduit and lead covered cable—Altman Desk and Table Pushes, round and rectangular in different styles and finishes.

HELPFUL SALES LITERATURE
Gladly Mailed Upon Request

MINERALLAC ELECTRIC COMPANY

25 No. Peoria St.
CHICAGO, ILLINOIS

E-Z Bolt Anchors Can't Pull Out



These labor and money saving bolt anchors should be a part of every electrical contractor's stock. They are ideal for fastening motors, signs, boxes, pipe hangers, signal lights, brackets, railings, etc.

E-Z Bolt Anchors

Assure Easier Installations
Anchorage made before work applied. Save time, work and, of course, money.

Less depth to drill—cuts labor costs. Only 1 lead and 1 iron part to install. Vibration only increases the anchor's grip.

**Clip coupon now
so we can send free sample**

Name
Address
City
State

Kempton Mfg. Corp.
148 West 23rd Street
New York City

E. C. 3

Third Wire Sheathed Cable

The prices of sheathed cable with the bare third wire for grounding purposes is slightly higher than that without the third wire. Prices on both types will be found in the Resale Price Section, PL-9.

Utah League Promotes Wiring

During 1928 there were prepared by the lighting service bureau of The Electrical League of Utah, a total of 282 plans and specifications. There were included in these plans 21,492 lighting outlets. Of these jobs, 234 included 19,128 outlets which were actually installed. It is estimated according to the league's records that the value of the wiring and fixtures for these jobs was \$123,622.

* * *

When Special Rules Are Needed

Special rules, when needed, should be put through and then enforced, according to the Michigan Association of Electrical Inspectors. The topic was covered as follows in the association's January bulletin:

"If you need special rulings in your locality, put them through. Make sure they will 'hold water' before you publish them, that they are necessary and make for progress, then make them stick. This can be done by treating all contractors alike.

"We all make mistakes, but the wireman who constantly makes them, and often the same ones over and over, and always hopes and expects to get by with it is a thorn in the inspector's side until the latter can effect a cure.

"This can usually be accomplished by reasonably strict adherence to the rules, and if good judgment is used in asking for changes to be made, you not only establish yourself in the community as a real inspector, but automatically raise the wiring standard.

"Remember, this is not accomplished by asking for a lot of petty changes. Often a job is all right electrically but mechanically very

Rubber Insulated Wires and Cables

Insulating Tapes and Splicing Compounds



Raven
Core
Wires
Grimshaw
Tapes
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NEW YORK INSULATED WIRE CO.

Main Office
114 Liberty Street,
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ELECTRICAL EDUCATOR

LEARN ELECTRICITY—EASY AS A, B, C. Key to theory and practice. Applications, Rules, Calculations and inside information on Maintenance and repair of Electrical Appliances, Motors, Wiring, Lighting, Switchboards, Transformers, Batteries, Armatures, Generators, Radio, Ignition, Welding—1,000 pages, 2,000 diagrams—a reliable reference. Trouble saving information. **AUGELS HANDY BOOK OF PRACTICAL ELECTRICITY**. Price \$4. Let us mail it to you for free trial; pay \$1 a month if satisfied. Order today!

Theo. Augel & Co., 65 W. 23d St., New York, Dept. 800

Keep Up-to-Date

By reading these pages you will acquaint yourself with what is newest and best in electrical supplies and equipment. When communicating with an advertiser mention

Electrical Contracting

poor; something to be criticised, but not condemned.

"On the other hand, lax inspection is a menace to the industry and the public at large, while no inspection is criminal and should be liable to prosecution."

* * *

Low Voltage Deaths

At the last meeting of the American Society of Safety Engineers, S. E. Whiting, chairman of the low-voltage electrical committee presented some interesting figures on deaths from low voltages. These figures were compiled largely from newspaper reports throughout the United States during the three summer months of 1928. They comprise all utilization circuits below 750 volts, including trolley and third-rail circuits of railways, mines and industrial plants.

Recent Low-Voltage Fatalities

(Approximate data only)

Type of Utilization Equipment	No. of Deaths
Fixed machines, switches and wiring industry	59
Extension lamps and cords in industry and homes	43
Portable tools in industry and homes	33
Home electric equipment (other than lamps and tools)	28
Electric railways	17
Miscellany	7
Total	187
Average Frequency During Sum- mer Months	
Total cases from June 15, 1928, to Sept. 15, 1928	143
Average rate during this period	10 deaths per week

In presenting these figures Mr. Whiting said:

"Practically all of these cases occur in violation of the National Electrical Code. Why is the Code being violated? Because you and I in our homes, when we want any electrical connections made, do not hire an electrical contractor to come around and charge us \$5.00 or \$10.00 to connect an extension lamp in a safe manner. We go around to some store and buy sockets and the lamp cord, etc., etc., and wire them up ourselves."

Another reason for DUTCH BRAND FRICTION TAPE Leadership!



No. 3 of a series of ads
on "Why You Should
Use and Sell Dutch
Brand Friction Tape"

What is the purpose of Friction Tape? To insulate exposed connections, of course, and it takes a real electrical Friction Tape to do it—a tape with a genuine rubber backbone on a foundation of tough cotton sheeting.

DUTCH BRAND Friction Tape is made with rubber. Just one layer of this good tape will resist up to 2200 volts. That's safety—you can't expect its equal in ordinary tape. Let the friction tape you use serve its purpose. Play Safe! It's the best economy.

Greater insulating qualities is just another reason why DUTCH BRAND Friction Tape is known as the "Extra-Service" product. By "Extra-Service" is meant a tape which exceeds the rigid specifications of The American Society for Testing Materials, Government agencies and large electrical corporations.

DUTCH BRAND also has longer life, greater strength, and adhesion—besides, it will not fray or ravel. Such a tape is economical.

We invite you to write us for a free test sample.

Jobbers everywhere carry DUTCH BRAND Friction Tape. Available in three color Counter Displays for retail selling.

VAN CLEEF BROS. Established 1910

Manufacturers Friction and Rubber Tape
Woodlawn Ave., 77th to 78th Sts., Chicago, U. S. A.



A RUBBER TAPE OF
GREAT STRETCH
AND STRENGTH

A clean, perfect fusing
rubber tape, a tough
long life product.
Quality approved
by the Underwriters'
Laboratories.

Manufacturers News

A department for the announcement of activities of manufacturers that are of interest to contractors, such as changes in executive personnel, branch offices, new products, etc.

Morgan Ellis Promoted

Steel & Tubes, Inc., announces the election of Morgan P. Ellis as vice-president and general manager. Mr. Ellis will be located, effective March 1, at the company's Brooklyn, N. Y., office, to which the headquarters of the electrical division have been moved.

Murray S. Whitfield, who was formerly Cleveland district manager of the Chicago-Jefferson Fuse & Electric Mfg. Co., has been appointed sales manager of this division.

The following representatives have been assigned territories in the eastern district: James J. Coughlin, New York (metropolitan district); C. F. Resseguie, Philadelphia; Thomas D. Mitchell, Baltimore; John R. Wilkins, Boston, and M. F. Stranahan, New York State.

* * *

Addition to Durant Factory Completed

A large addition to its factory has been completed by the Durant Mfg. Co., Milwaukee, manufacturers of the "Productimeter" line of wire measuring machines. This addition gives Durant approximately three times its previous manufacturing facilities.

* * *

Wire Pioneer Dies

Raphael Eccleton Gallaher, president of the New York Insulated Wire Company, died in New York, on February 10. Mr. Gallaher, who was 78, was a pioneer in the wire and cable industry. In 1884 he organized the New York Insulated Wire Company and held the position of secretary from that time until 1927 when he was elected to the presidency.

With the death of Mr. Gallaher the wire and cable manufacturers have lost one of their most capable leaders and one who merited the respect and admiration of the entire electrical industry.

* * *

Fixture Manufacturers Combine

Announcement is made that the Art Craft Fixture Co., Newark, N. J., and the J. H. White Mfg. Co., Brooklyn, N. Y., have combined certain activities of their respective businesses which has resulted in the development of greater manufacturing and designing scope and broader sales and merchandising service for both firms. The fixture lines of both companies are now manufactured at the Art Craft factory in Newark, N. J., and will be marketed by the White selling organization. There is to be no change in the personnel of either company.

* * *

B. T. Bechtel Dies

B. T. Bechtel, district sales manager of the Youngstown Sheet & Tube Co., Youngstown, O., died suddenly on Friday, February 1.

Ender Appoints Jaret Sales Manager

Joseph T. Jaret, formerly treasurer of Sun-Ray Lighting Products, Inc., is now sales and general manager of the Ender Mfg. Corp., New York City.

Three new men have been added to the company's sales staff: B. Agman, covering New York state; C. W. Allen, representing in Minnesota and North and South Dakota; Victor Cohen, handling the metropolitan district.

* * *

Cutler-Hammer Purchases Trumbull-Vanderpoel

Cutler-Hammer, Inc., Milwaukee, Wis., announces that it has acquired the business of the Trumbull-Vanderpoel Electric Mfg. Co., Bantam, Conn., which will be operated as a subsidiary under its present name.

* * *

Assistant Appointed for Display Men

Curtis Lighting, Inc., Chicago, announces the appointment of Stanley E. Kraft as active directing head of the company's store lighting division in Chicago.



NEW WIRE MILL FOR SOUTH—This is the new plant of the Southern States Cable Co., at Mobile, Ala., which started production recently. It is a division of the General Cable Corp. Harry Parker, formerly with the Rome Wire Co. division of this corporation, has been transferred to the Mobile plant as manager and secretary.

Art Metal in New Plant

The Art Metal Co., Cleveland, manufacturers of "Amco" safety holders, has recently moved into its new plant at 1800 E. 38th St. The new plant has practically three times the amount of floor space formerly occupied and much new equipment and machinery has been installed.

The company announces the appointment of the Commercial Electric Supply Co., Toledo, O., as its distributor in that territory.

* * *

Lang's Daylight Opens Chicago Office

Lang's Daylight, Inc., Cleveland, O., has opened an office at 53 W. Jackson Blvd., Chicago, in charge of W. C. Bell, who for the past 16 years has been in the sales department of the National Lamp Works.

* * *

Issues Floodlighting Bulletin

Bulletin 54 is a recent publication on "Floodlighting" issued by the National Lamp Works at Nela Park, Cleveland. It presents a comprehensive design procedure, together with suggestions on floodlighting effects, equipment, and equipment location. A section on the lighting of railway classification yards is included.

* * *

Fullman Has New Eastern Representative

The Fullman Mfg. Co., Latrobe, Pa., announces the appointment of Moncrief & Graf, New York City, as its district sales representative for eastern New York State and northern New Jersey.

* * *

Slogan Contest

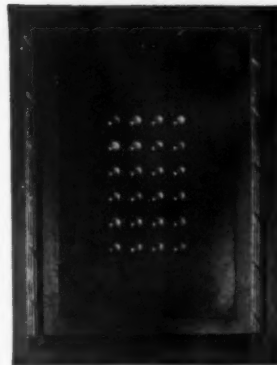
Cash prizes totaling \$500 will be awarded by the National Electric Light Association and the National Electrical Manufacturers Association for the best slogans to promote the use of electric heat in industry. The first prize will be \$250; second, \$100; third, \$50, and four of \$25 each. Each contestant may submit not more than three slogans, each to be accompanied by an analysis of 100 words or less.



Holtzer-Cabot
SIGNAL SYSTEMS
ESTABLISHED 1875



Holtzer-Cabot has designed and built complete signaling systems for some of the largest institutions in the country.



Annunciators

Target or Lamp Indications

Electrical reset annunciators of the very highest grade designed for office, bank and fine residential installation.

Furnished in flush or wall types or for surface and desk mounting.

Fronts of ornamental bronze to harmonize with architectural design of surrounding fittings.

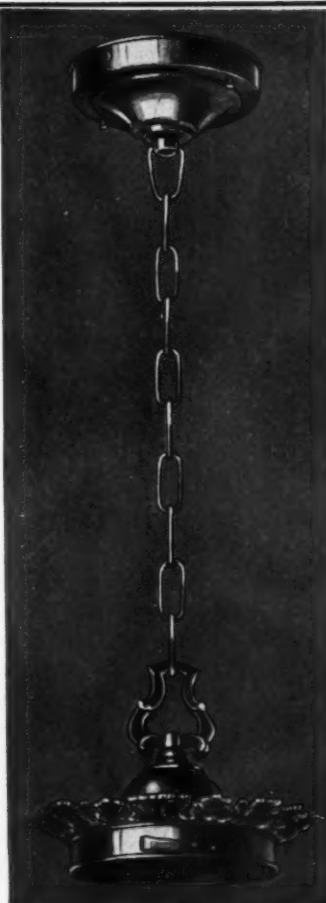
Compact in size and finished to meet the most exacting requirements.

Catalogue with latest prices furnished on request.



The Holtzer-Cabot Electric Co.

Boston Philadelphia Chicago Cleveland New York Minneapolis Baltimore Detroit
Syracuse Kansas City Pittsburgh



PAT'D AND PAT. APP. FOR

SEND—
For the New



Catalog of Moneymakers

The new quick-selling hanger shown at the left is only one of many money-making items shown in our catalog. This hanger has special cast loop (pat. app. for) and flaring cast ring that make it look massive and extremely rich. It takes instantly with 80% of your prospects. Your jobber stocks it. Get price and discount from our catalog. We will send one for the coupon. Mail it now.

This Coupon Brings Catalog

The Art Metal Co. "Hanger Specialists"
1800 E. 38 St., Cleveland, O.

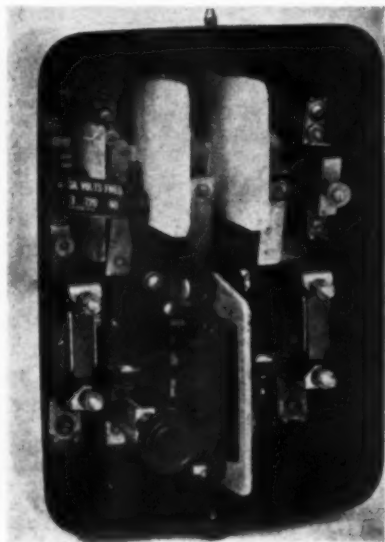
Send me your new catalog of moneymakers. My jobber's name and address is.....

My name

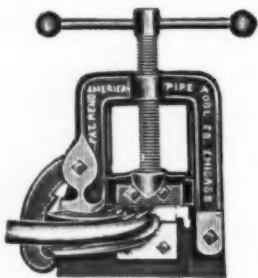
Address.....

City.....State.....

New Electrical Products



The General Electric Co., Schenectady, N. Y., announces the addition of the CR-7006-D-26-A switch to its line of general-purpose starters for small alternating-current motors. This is a three- and four-pole magnetic switch with self-contained "start" and "stop" stations incorporating features for overload protection and undervoltage protection or release. It is used for starting and protecting small alternating-current motors that can be thrown directly on the line. It consists of a triple-pole, barrier-type contactor and a double-coil temperature overload relay, also starting and stopping contacts ordinarily provided by a remote-control push-button station.



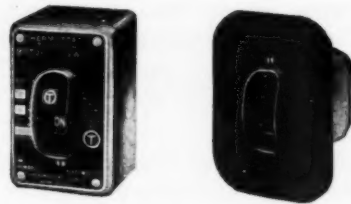
This tool which is being marketed by the American Pipe Tool Co., Chicago, is a combination of three tools in one: 1. It is a pipe vise of from $\frac{1}{8}$ in. to 2 in. capacity. 2. It may be used to bend conduit or pipe up to and including $\frac{3}{4}$ in. 3. It is also designed for use as a ceiling plate holder, taking all standard sizes of plates or ceiling boxes, for reaming holes. The notches in the latch when tightened hold the plate in firm position.



Here are shown three new products of the Crouse-Hinds Co., Syracuse, N. Y. The No. 14597 grounding bushing is designed to take the place of the ordinary bushing within the cabinet, all grounding leads being enclosed and the fire hazard confined to the interior of the box and the jumpers, No. 14593 of which is illustrated, protected from mechanical injury. The bushings are made of brass in two types—locking and non-locking. The type CGB connector with lead sleeve shown is for use when bonding flexible conduit or armored cable to a box.



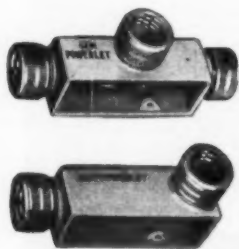
The Chicago Pneumatic Tool Co., New York City, is marketing the Little Giant electric hammer drill, equipped with a universal motor operating on 115 or 230 volts. According to the manufacturer, it is particularly adapted for close quarter work and for drilling in concrete and soft stone.



A small single pole no fuse tumbler switch for protecting fractional H. P. motors against overload is announced by the Trumbull Electric Mfg. Co., Plainville, Conn. This new "T.T." (thermostatic tumbler) switch may be had in three types—surface, flush and the switch alone. The first two are illustrated. Handle trips to "off" position on an overload. To reset it is simply necessary to throw the handle "on" when the thermostatic metal has cooled.



This adaptable hanger offered by the Art Metal Co., Cleveland, has special cast loop and flaring ornament giving a massive and rich appearance. It is finished in statuary bronze with gold effect on cast parts. It incorporates the "Amco" safety holder feature which locks glassware into position by simply placing the globe into fitter and closing the lever on holder.



The Chicago-Jefferson Fuse & Electric Co., Chicago, is now manufacturing its line of Powerlets in the threadless type. These are made of malleable iron in one piece, no seams, welds or inserts. They fit snugly against a flat surface without turning and are adaptable to either standard conduit or the new metallic tubing (thin wall conduit), a special clamping ring being necessary for the latter. These fittings are approved by the Underwriters' Laboratories and are obtainable in sizes from $\frac{1}{2}$ in. to 2 in.

A TELLING TESTIMONIAL TO **PAINE** SPRING-WING TOGGLE BOLTS 26,184,971

toggles sold in the past few years,
thru the Electrical, Hardware and
Plumbing Supply Jobbers of the
U. S. A. and Canada.

PAINE TOGGLES are known over half way
around the world. They have gained this
reputation solely on their merit. They are
nationally advertised and cataloged by lead-
ing jobbers from coast to coast.

Samples and prices on request.



**The
PAINE
Company**
2947
Carroll Ave.
Chicago, Ill.
79
Barclay St.
New York, N.Y.

The Jiffy Line

Jiffy Tools Reduce Costs!

We guarantee your
satisfaction. Order
any tool illustrated
on the margin, on
approval. If YOU
are not satisfied re-
turn the material at
our expense.



Pipe Bender



Nipple Chuck



Box Cutter

A Bulletin describ-
ing the complete
line in detail will
be mailed upon re-
quest. Fill in the
coupon below or
send in your order
ON APPROVAL.

Paul W. Koch & Company
25 So. Wells St., Chicago

☐ Send information regarding Free
Trial.

☐ Send the "JIFFY LINE" Bulletin.

Name

Firm

Street

Address

"Established 1915"

Day-Brite in New Factory

The Day-Brite Reflector Co., St.
Louis, is now located in its new
factory and office building at 3825
Laclede Ave.

* * *

Four Control Manufacturers Merge

Announcement is made of the
consolidation of the Leachwood
Co., Janesville, Wis., the Time-O-
Stat Corp., Milwaukee, Wis., the
Absolute Con-Tac-Tor Corp., Elk-
hart, Ind., and the Cramblet En-
gineering Corp., Milwaukee, Wis.,
forming the Time-O-Stat Controls
Co. The new corporation will
have its main offices at Elkhart,
Ind., as soon as the planned en-
largements of the main plant have
been completed. A new laboratory
for experimental and developmen-
tal work will be erected.

The officers are: Julius K.
Luthe, president and treasurer; A.
I. Wallace, Paul K. Cramblet, E.
J. Leach and Roy W. Johnson,
vice-presidents.

* * *

P. & S. Issues New Dealer's Helps

Pass & Seymour, Inc., announces
the publication of three new units
in their dealer's help campaign. A
general catalogue that covers the
full range of the company's prod-
ucts, together with a special Ala-
bax porcelain lighting fixture man-
ual in color are designed both as
a ready reference for dealers and
as a guide for consumers in the se-
lection of equipment. A folder
suitable for dealer imprint and
general distribution is also sup-
plied.

* * *

The Cincinnati-Victor Co., Cin-
cinnati, O., has appointed the
Apartment Necessities Co. its dis-
tributor in the Detroit territory.
The Pursell Co., Cincinnati, will
handle southwest Ohio, including
Lima, Dayton and Cincinnati, also
three northern counties in Ken-
tucky and three southeastern coun-
ties in Indiana.

* * *

Bulletin No. 158 has been issued
by the Wagner Electric Corp., St.
Louis, on its small vertical motors,
covering all types in ratings from
1/8 to 1 1/2 H. P.

WIREMOLD



"I OK'D IT LONG AGO"

New "MASTER-SIZE" Wire-
mold opens up big field of
industrial and commercial in-
stallation. Wiremold "BEAM-
STRAP" makes it almost as
easy to lay wires 'round
beams as on surface. Other
new features and sales helps.
Write for catalog and inter-
esting details.

THE WIREMOLD COMPANY
Hartford, Conn.

Electricians!

—this hammer is going over
big! It is
new, useful,
and sells to
you direct
for only

\$2.00

AN elec-
trical me-
chanic designed
this hammer. He
gave it a long
poll (2 inches) to
reach over pipes
and into outlet



boxes. The
claw is built
for prying; the
handle is sea-
soned Hickory. One
electrician writes,
"Now I wouldn't be
without it in my tool

kit!" You'll say the same—or your
money back!

SEND COUPON TODAY!

Evansville Tool Works, Inc.,
Evansville, Indiana

Gentlemen:

I am enclosing my P. O. Money Order
for \$2.00. Please send me the No. 77
Electrician's Hammer at once.

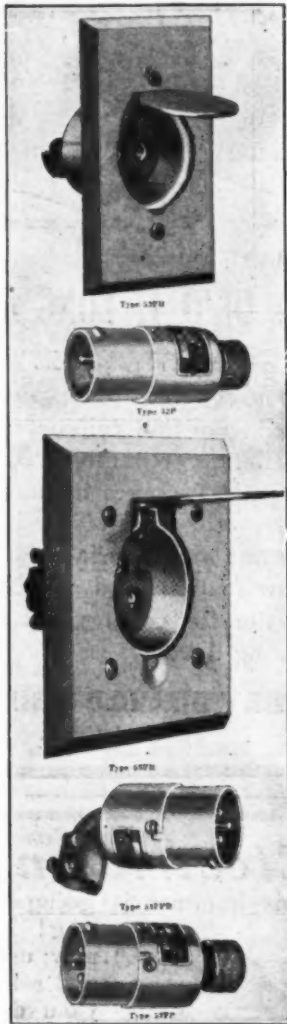
Hdw. Dealer

Address

My name

Address

New Electrical Products

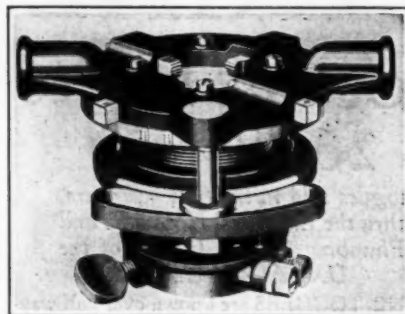


The Ralco Mfg. Co., Chicago, is marketing types 53FR and 52FR heavy duty flush receptacles. The former is for electrical ranges, warming tables, etc., and the latter for two conductor services. The plugs have heavy shell of drawn steel treated to prevent corrosion. Contacts are fully protected and strain is taken off contacts, insulators and binding screws. Receptacles can be mounted on standard outlet box cover.

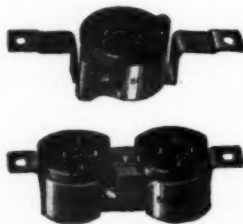


The Durant Mfg. Co., of Milwaukee, offers the Model L-10 wire measuring machine. The speed runs as high as 890 R. P. M. The standard model records in feet.

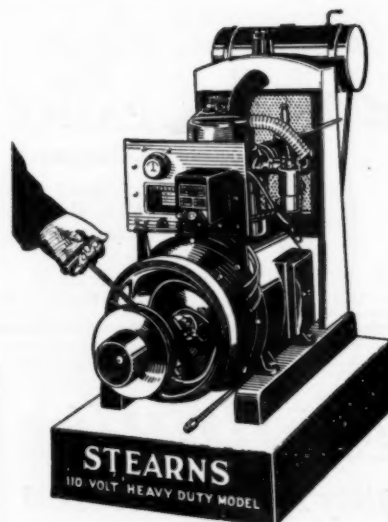
The Borden Co., Warren, O., is making the No. 11 plain and No. 11A ratchet die stocks, No. 11 being shown here. These are self-contained, having one set of dies which are quickly set to thread 1, 1¼, 1½ or 2 in. conduit. No time is lost in changing dies as they are always in the tool. As the die head and threaded barrel are two separate parts it is only necessary to replace the threaded barrel when repairs are needed. The pipe gripping end, or work holder, centers the pipe accurately, but can be set to cut crooked (Drip) threads.



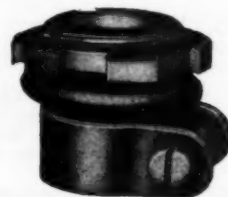
This "Chip Chaser" announced by the Oster Mfg. Co., Cleveland, is a small ratchet die-stock with the advantage of a quick changing die head for each size pipe. As the name indicates the dies are built to permit the chips to fall away as they curl off the pipe. Finger tip control allows for easy operation, a flip of the finger changing it from forward to reverse or to neutral. It is made of pressed steel.



The Beaver Mfg. Co., Newark, N. J., has just completed the development of two new flush receptacles as illustrated. Both the single and duplex types are of bakelite. Slots are provided for both tandem and parallel bladed caps and wires attach to the sides to afford easy inspection after the receptacle is mounted in the outlet box.



The Stearns Motor Mfg. Co., of Ludington, Mich., is announcing a new 110-volt hand started gasoline generator. No batteries are used, but it can be converted into a battery set by using a 110-volt battery. It is equipped with a 1½ KW 110-volt generator and a gasoline engine. Net weight 360 lbs.



The National Electric Products Co., Pittsburgh, Pa., has developed the No. 2163 squeeze type cable connector using "Bondnuts" which will tighten permanently against box wall due to the concave shape of the connector. The sharp bonding spurs save the labor of scraping enamel around knockout by automatically cutting through it. Both "Bondnuts" and connectors are sherardized.

SAVE TIME



Speed!

THE EASY fishing conduit! Inside coating our own Special Black Enamel—baked on. Zinc outside coating double the Underwriters' requirements. Needs no fancy coating on top of zinc.

*You will like Pittsburgh Standard
Try it on your next job*

**ENAMELED METALS CO.
PITTSBURGH, PA.**



Ravel?

No indeed—
It Sticks
It's Strong
It's Safe
because—
It's O. K.!

Ask Your Jobber
About O.K. or Write
us for a Sample

APPLETON RUBBER CO.
Franklin, Mass.

Chicago Steel Tank Opens Minneapolis Branch

Announcement is made of the opening of an office in Minneapolis, Minn., at 516 Third Ave., So., by the Chicago Steel Tank Co., Chicago. C. W. Allen will be in charge, covering Minnesota, Wisconsin, South Dakota and North Dakota.

This company also announces the appointment of C. Dent Slaughter as its representative on the Pacific Coast.

* * *

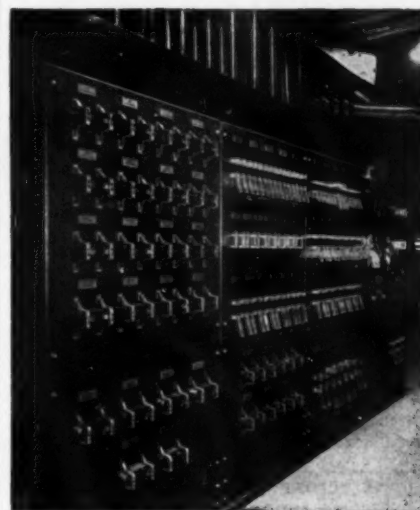
Standard Underground Cable Announces New Personnel

The standard Underground Cable Company, Division of General Cable Corp., announces the following changes in sales personnel and in branch office locations:

C. J. Marsh, vice president of the Standard Division, also manager of the New York sales office, has been transferred to the General Cable Corporation to supervise the purchase of metals. R. S. Hopkins, assistant manager, has been advanced to manager of the New York office and O. G. Miller made assistant manager.

The Atlanta, Ga., office, formerly a sub-office of Washington, D. C., has been made a main branch sales office with E. B. Hook, Jr., as manager and J. A. Peacock district manager. District sales offices, reporting to the Atlanta office, have been opened in Birmingham, Ala., and Charlotte, N. C., with M. L. Tice and W. D. Hampton as district managers. The address of the Atlanta office has been changed from Candler Bldg. to Healey Bldg. The Birmingham office is located in the Watts Bldg. and the Charlotte office in the First National Bank Bldg.

Edw. Kerschner, formerly manager at Washington, D. C., was transferred to the Chicago office, now in the Bankers Bldg., as manager some time ago, and H. C. Richardson has been advanced to manager of the Washington office. Mr. E. J. Pietzcker, formerly manager of both the Chicago and St. Louis offices, is devoting his entire time to the St. Louis office, which has moved to the Ambassador Building.



BERTHOLD SWITCH and PANEL BOARDS for LIGHT and POWER

Berthold "Selectrolite" System of Lighting Control for theatres, auditoriums, lodgehalls, etc.

GUS BERTHOLD ELECTRIC CO.
555 W. MONROE ST. CHICAGO, ILL.

Steel
Cabinets



Stage
Equipment

"DETROIT" RUBBER COVERED WIRES

(Reg. U. S. Pat. Office.)

**RUBBER INSULATED
WIRES AND CABLES**

LAMP CORDS

AUTOMOBILE WIRES

PARKWAY CABLES

**LEAD ENCASED
RUBBER INSULATED
WIRES AND CABLES**

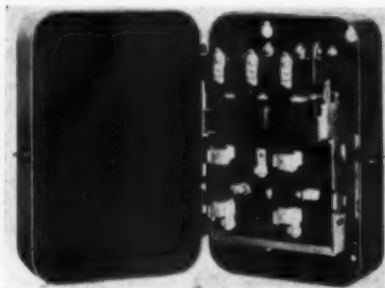
**UNIDUCT ARMORED
WIRES**

**FLEXIBLE METALLIC
CONDUIT**

Detroit Insulated Wire Company
Detroit, Mich.

Division of General Cable Corporation

New Electrical Products

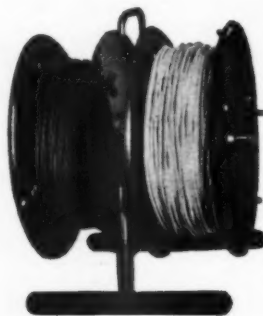
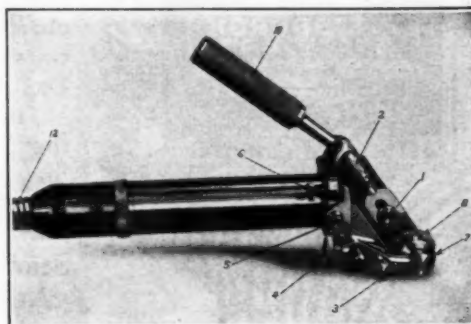


A cross the line air motor starter, type A-30, has been developed by the Conduit Electrical Mfg. Corp., Boston, involving a new principle of arc prevention. Heretofore the arc with its accompanying effects of gas and contact burning has been assumed unavoidable and efforts have been directed to extinguishing the arc only after its formation. This starter operates to prevent the arc from forming by preventing ionization when interrupting a circuit. On interruption of currents six to seven times its normal rating, tests on the starter have shown, it is stated, that there is only a spark and no gas or contact burning. The starter is designed for use with squirrel cage induction motors up to 20 H. P., 550 and 440 volts; 15 H. P., 220 volts, and 7½ H. P., 110 volts, and is furnished with thermal relays for time-lag overload protection and arranged for under-voltage protection.

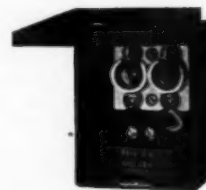


This "Midget" set of wrenches recently placed on the market by the J. H. Williams & Co., Buffalo, N. Y., contains seven "Super-wrenches" with openings of from 7/32 in. to ½ in., each having two openings of the same size, one set at 15 degrees and the other at 75 degrees. These wrenches, which are drop-forged from chrome molybdenum steel and finished in rust-proof chrome plate, are packed in a black leatherette case which measures 5 by 4 by ¾ in. closed.

A new mica undercutter is being manufactured by the Ideal Commutator Dresser Co., Sycamore, Ill., which operates in a space only 3½ in. wide thereby eliminating the necessity of dismantling brushes, brush boxes, etc., and their reassembling. This feature, according to the manufacturer, saves from one to three hours on every job and avoids lengthy shut-downs. This new undercutter, according to the manufacturer, will not heat, jump or chatter.



A new double unit wiring reel is presented by the Hykon Mfg. Co., Alliance, O., which features a new base construction designed to lighten, strengthen and make the reel more compact and at the same time adaptable to larger diameter coils. The danger of over-balancing and tipping is also eliminated by this new base, it is claimed. This reel will take reels of No. 8 or smaller wire and it can be obtained in both 15 and 18 in. units.



The Killark Electric Mfg. Co., St. Louis, Mo., has brought out a combination of bell transformer and cutout in a steel box thus permitting the contractor to install a transformer without exposing 110-volt wires.

The General Electric Co. has developed a slot insulation paper for which is claimed such features as resistance to folding, high tearing strength, high tensile strength and high dielectric value. It is listed as No. 1850.



The Yaxley Mfg. Co., Chicago, has placed on the market a complete, self-contained burglar alarm, which works on the closed circuit system. It includes the alarm cabinet, with sensitive relay, bell, batteries and testing key and the trap, which consists of a swiveling receptacle and jack, insulated flexible conductor, attachment plug and an automatic reel. The trap may be set to extend across a door opening or the conductor may be looped over a door knob, threaded through a window lift, attached to a window shade or curtain.

Concrete Inserts Save Time in Conduit Installation



Pound them in the form; the concrete holds them solid; hang the pipe below.

Send for Bulletin or Sample

Commonwealth Electric Co.
417 Broadway, St. Paul, Minn.

ESTIMATOR'S TIME SAVER



Rotometer

Every estimator's tool kit should have
1. Rotometer ..\$4.50
2. Tallying Machine ...\$4.50
for taking off quantities of material quickly and accurately. Used by leading estimators. **GUARANTEED** to satisfy you or your money back. Send \$4.50 each for Rotometer or Tally Machine, postpaid.

The Peerless Blue Print Co.

341-347 Fifth Ave.,
New York City



On a Vertical Conduit On a Horizontal Conduit

ELECTROLETS

Service entrance fittings that will go on the top of a vertical conduit, or on the end of a horizontal conduit.

Send for Booklet

KILLARK ELECTRIC MFG. CO.
3940 Easton Ave., St. Louis, Mo.



THE RAWLPLUG CO., INC.

66 West Broadway,
New York City

Branches in 25 Cities
Write for Bulletin B-201

Mr. Arthur Z. Barnes has been appointed district manager at Dallas, Texas, with offices in the Allen Building. He was formerly with the General Electric Co. of Texas.

* * *

N. E. M. A. to Meet in May

The spring meeting of the National Electrical Manufacturers Association will be held at The Homestead, Hot Springs, Va., May 20-25, 1929.

* * *

Rigby to Represent Taplet

Edward Rigby has been appointed representative in the New England territory by the Taplet Mfg. Co., Philadelphia. He replaces Albert Mann who represented the company for many years in that territory but who has now retired from the electrical industry.

* * *

The Federal Steel Products Co., Newark, N. J., announces the appointment of the Hastings Sales Co. as its representative in Boston, replacing James H. Healey. The Electric Service Device Co. will handle the Philadelphia territory formerly covered by Fred W. Carry, who has been transferred to the Newark office. He will travel northern New Jersey as a missionary man. Warehouse stocks will be maintained at both Boston and Philadelphia.

* * *

A handy booklet has been issued by Steel & Tubes, Inc., Cleveland, on its new product, "Steeltubes," which enumerates the various advantages of this new thin wall conduit.

Classified Advertising

Wanted: A large Chicago Electrical Contractor desires to employ an experienced Estimator having thorough knowledge of all branches of Electric work. Must be a capable Engineer. Good salary and future. State experience and age. Confidential. Box 544, ELECTRICAL CONTRACTING, 53 W. Jackson Blvd., Chicago.

Wanted: Man in the east who understands electrical contracting, knows wiring practices thoroughly and has ambition to write. Write for appointment to Electrical Trade Publishing Co., 280 Madison Avenue, New York City.

E-Z WIRE STRIPPER

A HANDY TOOL



This inexpensive tool strips wire of 10 to 20 gauge 20 times faster than usual methods.

A MONEY BACK GUARANTEE with every E-Z Wire Stripper. Send for yours now.

\$5⁰⁰ LIST

PYRAMID PRODUCTS CO.

2313 South State Street

Chicago, Ill.

Wrigley Toggle Bolts



"Wrigley For Quality"

Made of heavier gauge steel.

Can be put through smaller holes than the ordinary toggle bolt.

First Toggle Bolt made.

THE THOMAS WRIGLEY CO.
504 Sherman St., Chicago, Ill.

General Electric Supply Corp.

EDISON MAZDA LAMPS ELECTRICAL AND RADIO SUPPLIES

BALTIMORE RICHMOND
NORFOLK CHARLOTTE

Distributors for General Electric Company, Radio Corporation of America and other large and reputable manufacturers.

New Conduit Type Cable Support



A Simple Two Piece Cable Support for Vertical Runs.

Pamphlet Mailed Upon Request.

O. Z. Cable Support Co., Inc.

45 Bergen Street,
Brooklyn, N. Y.

SINCE 1895



MORE NEW OUTLET BOX DEVICES

WEBER OUTLET BOX SWITCHES

Rating } 5 Amp. 125 V.
 } 3 Amp. 250 V.

Approved by Under-
writers' Laboratories,
February 24, 1928

Cat.
No.

2646 S.P., 3 1/4 inch
2647 S.P., 4 inch
2648 3-Pt., 3 1/4 inch
2649 3-Pt., 4 inch

A line of "dependable"
toggle switches perma-
nently attached to iron
box covers. Binding
screw terminals are ex-
posed in the rear, as in
sign receptacles. Covers
may be black, galvanized
or brass lacquer.

Sold Through Weber
distributors.
Send for Sample.

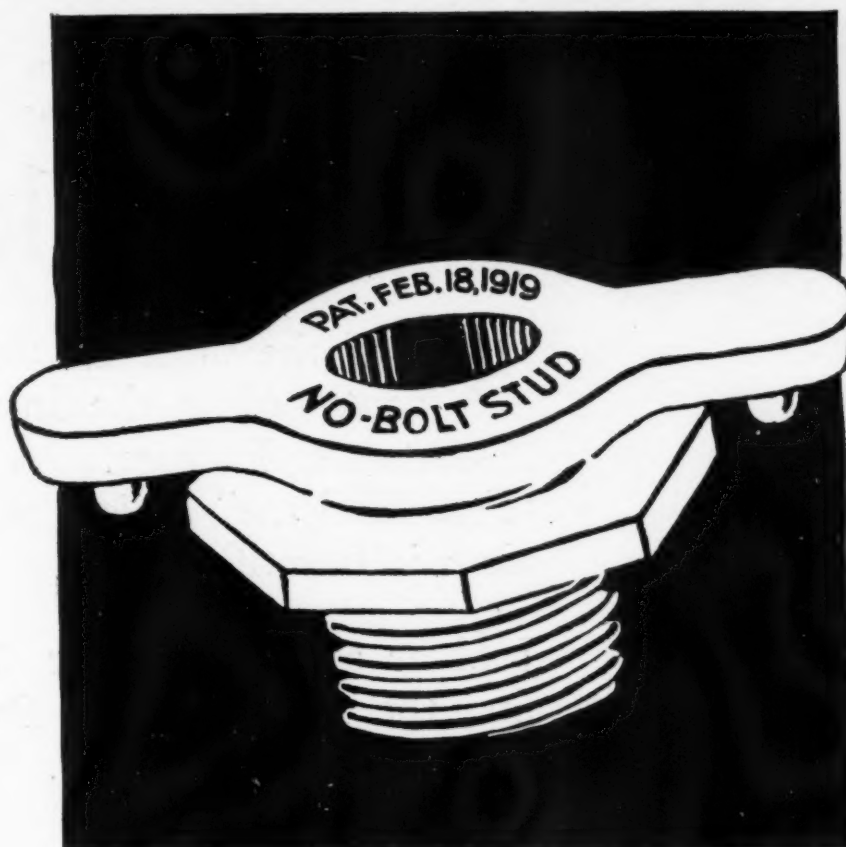
HENRY D. SEARS
General Sales Agent
80 BOYLSTON STREET
BOSTON MASSACHUSETTS



WEBER DEPENDABLE
WIRING DEVICES

Index to Advertisers

A		L	
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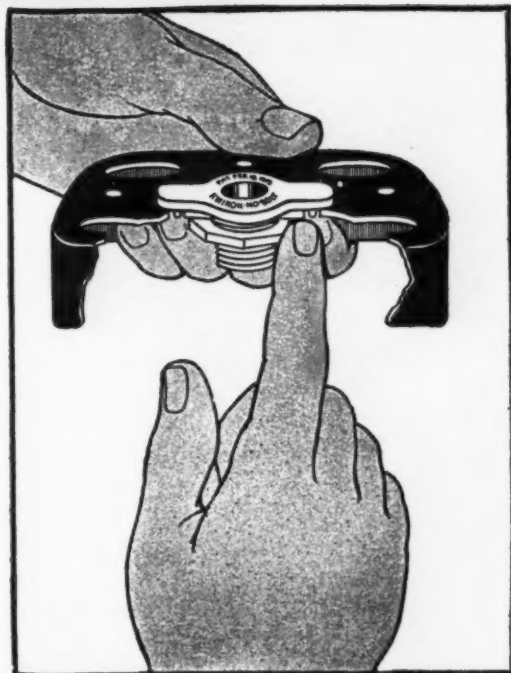
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